RESOURCES

NATURAL

Briefing Material for the Independent Review Committee

Volume 2

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WASHINGTON STATE DEPARTMENT OF
Natural Resources
Doug Sutherland - Commissioner of Public Lands

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Contents

Introduction

This volume (Vol. 2) of briefing materials for the Independent Review Committee focuses on information that answers questions and requests from the trust beneficiaries. Related information is grouped together in the following sections:

1. Revenue to Beneficiaries
2. Lands and Resources
3. DNR Management Costs
4. Others' Costs
5. Cost Centers for Environmental Compliance
6. Possible Cost Savings
7. Influences on Timber Prices
8. Other Revenue Sources

Some of the information is presented as text, but much of it is in charts, tables and diagrams (all labeled as "figures"). To assure readability of these figures in limited space, the following abbreviations have been used.

Ag. School	Agricultural School Trust
CEP& RI	Charitable, Educational, Penal and Reformatory Institution Trust
Univ.	University Trust
EWU	Eastern Washington University
WWU	Western Washington University
CWU	Central Washington University
TESC	The Evergreen State College
UW	University of Washington
WSU	Washington State University

1. Revenue to Beneficiaries

This section focuses on information to help answer the following questions and requests:

- Provide detail on how trust land revenue is distributed to the various beneficiary accounts.
- What have been the trends of the trust land revenues to the beneficiaries? Particularly what has been the trend of the trust land revenue to the common school construction account in comparison with the total state share of school construction funding?
- What is the size of the proposed increase in management funds in comparison to annual beneficiary funding from trust accounts?

1.1 Distribution of trust land revenue to beneficiary accounts.

The Department of Natural Resources (DNR) manages eight granted trusts and the state forestlands (two classifications). Revenue earned from the management of these lands is, in general, distributed in three different ways: a) to permanent funds, b) to capital funds, and c) to county taxing districts. Individual variations by trust, directed by law, add to the complexity of distributing and reporting revenue activity to the trust beneficiaries.

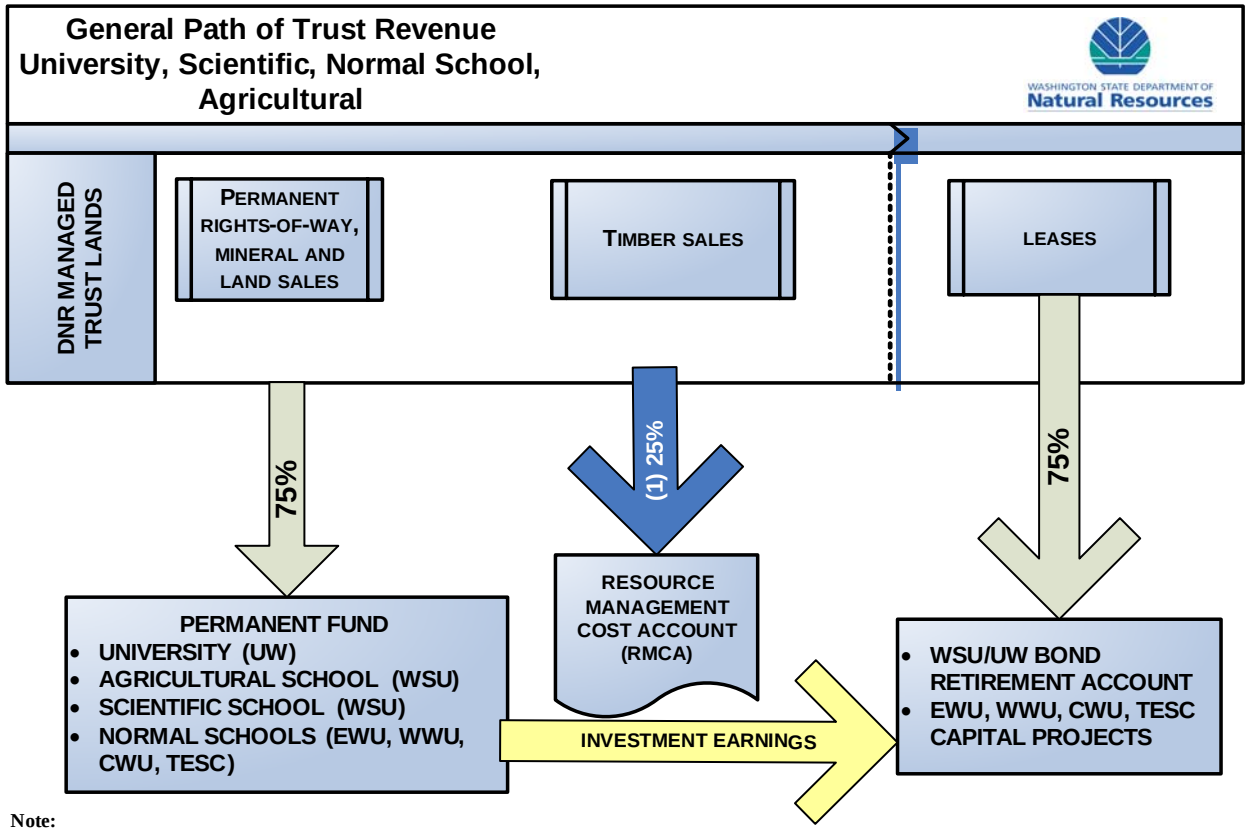
1.1.1 Permanent Fund Distribution

Seventy-five percent (75%) of revenue earned on the four permanent fund trusts (University-UW; Scientific-WSU; Agricultural-WSU; Normal Schools-EWU, WWU, CWU, TESC) generally is distributed to the four permanent funds (see section 1.1.4). The State Investment Board (SIB) invests the permanent funds and distributes investment earnings revenue to the UW and WSU Bond Retirement Accounts and to the four normal (regional) schools capital projects accounts. Revenue from leases on these trust lands goes directly to the bond retirement and capital project accounts. One notable exception is that mineral lease revenue is distributed to the respective bond retirement or capital project accounts, while mineral royalties are distributed to the respective permanent funds.

Generally, twenty-five percent (25%) of earned revenue goes into the Resource Management Cost Account (RMCA) to manage these trust lands. None of the gross revenue of the Agricultural trust is deducted for management. Therefore, it does **not** contribute to the RMCA. The state general fund, through the Agricultural College Trust Management Account, covers the costs of managing the Agricultural college trust lands.

See figure 1.1, next page.

Figure 1.1 General Path of Trust Revenue – University, Scientific, Normal School, and Agricultural



Note:
(1) 100% of the agricultural school trust revenue goes directly to the permanent fund or the WSU bond retirement account; management costs are paid by the general fund.
(2) Revenue from university transfer lands (formerly CEP&RI) are distributed in the same manner as CEP &RI with the UW bond retirement account as the receiving fund.

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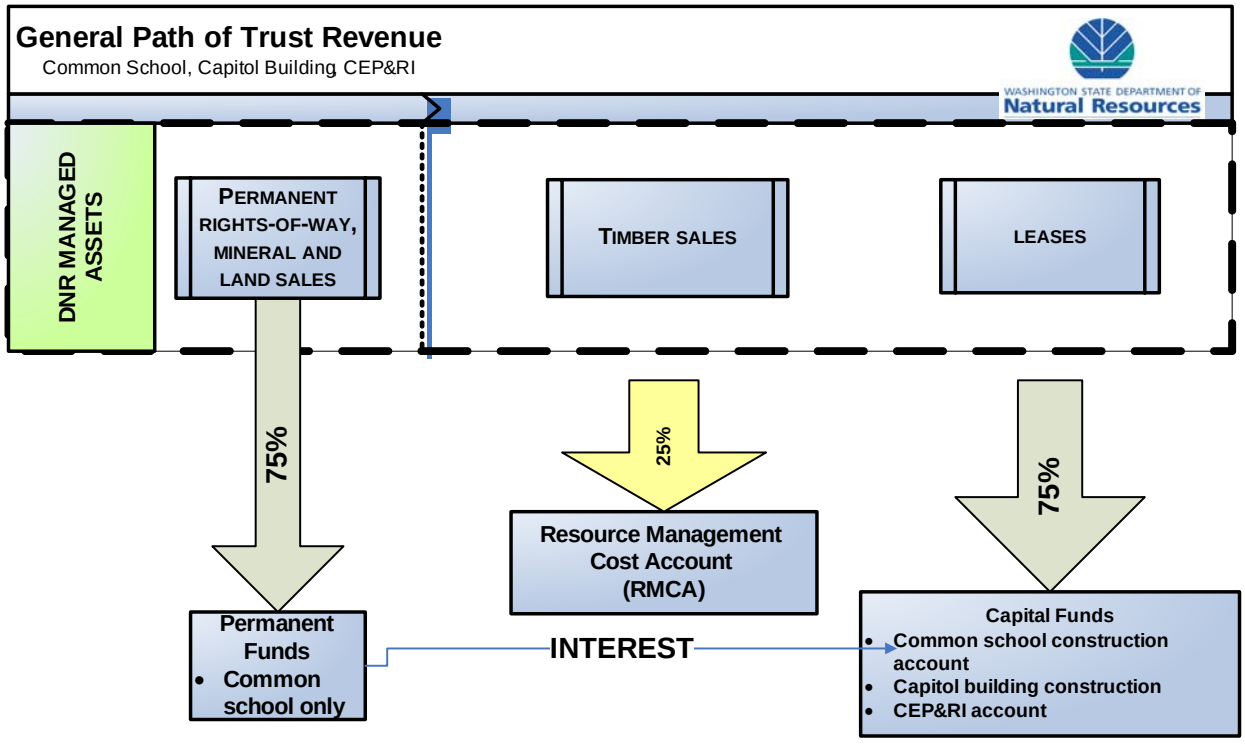
1.1.2 Capital Fund Distribution

The three capital fund trusts are the Common School, Capitol Building, and Charitable, Educational, Penal and Reformatory Institutions (CEP&RI) trusts.

Seventy-five (75%) of the timber and lease revenue earned on these three trusts goes directly to the capital construction budget accounts associated with the trust. The exception is the Common School trust where revenue earned from the sales of minerals, permanent rights-of-way, or land goes into the Common School permanent fund. This is a minimal amount: $525,000 in FY03 or less than one percent.

Twenty- five percent (25%) of revenue earned from these trusts goes into the RMCA for the management of the trusts.

Figure 1.2 Non-University Trusts



Note:
Capitol Building trust and CEP & RI do not have a permanent fund; revenue is distributed directly to their capital accounts .
Subject to changes and amendments overt time.

October 15, 2004

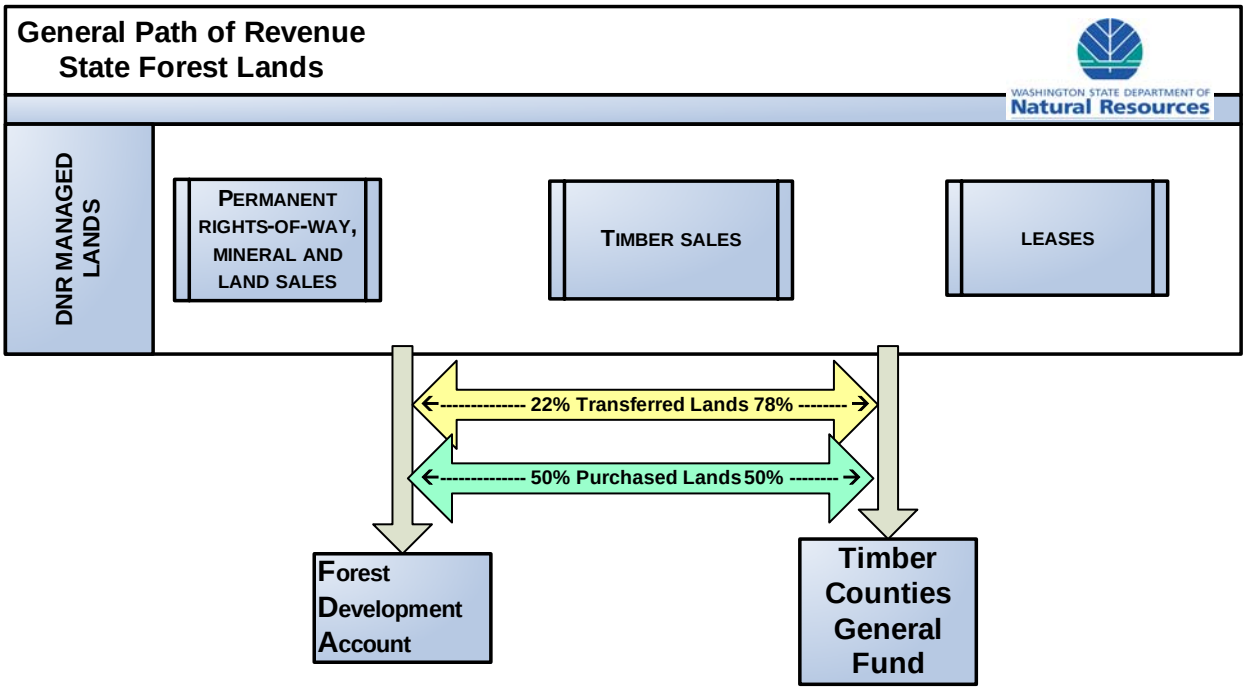
1.1.3 County Taxing Districts Distribution

There are two categories of state forestlands – forest board transferred and forest board purchased. In fiscal year 2003 nearly 71 percent of revenue earned on state forestlands went to county government and junior taxing districts in the counties in which the forest was located. Five percent went directly to the state general fund and 24 percent went to the Forest Development Account (FDA) for the management of these lands. The state general fund portion on purchase lands is distributed directly by DNR, while the county receives the state general fund share from transfer lands initially (per statute), and re-distributes this amount back to the state twice each year.

Forest board transfer: 78% to counties; 22% to FDA. The amount going to FDA will increase to 25% when the fund balance drops below six month operating expenses. Revenue to the Forest Development Account is currently 22% for Forest Board Transfer lands. Per BNR resolution #97-919 it will increase to 25% when the fund balance falls below the 6 month operating level.

Forest board purchase: 26.5% goes to counties; 23.5% to the state general fund; and 50% to the FDA (per statute).

Figure 1.3 General Path of Revenue – State Forest Lands



Note:
Revenue to the management fund, FDA, is currently 22% of forest board transfer lands. It will automatically increase to 25% when the fund balance drops below the 6-month operating reserve.

Subject to changes and amendments overtime.

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1.1.4 Permanent Funds

As figures 1.1 and 1.2 show, some revenue generated from the granted lands goes into permanent accounts.

There are five permanent funds managed by the State Investment Board for the benefit of the trustees. The SIB distributes investment earning from the permanent funds to the UW and WSU Bond Retirement Accounts, the EWU, WWU, CWU, and TESC capital project accounts, and the Common School Construction Account.

The five permanent funds and their market value as of June 30, 2004 are:

- Agricultural Fund (WSU) $148 million
- Scientific Permanent Fund (WSU) $162 million
- State University Fund (UW) $ 25 million
- Normal School Fund $208 million
- Common School Fund $168 million

1.2 Trends of trust land revenues to the beneficiaries

Total revenue of the trust has varied over time, especially as timber prices and volume have fluctuated. The following two figures show total revenues earned by the trusts and their distribution over time.

Figure 1.4 Total Trust Revenues: 1972 - 2004

Table 1. Total Trust Revenues for Fiscal Years 1972 through 2003.

Fiscal Year		Total Granted Trusts Revenues wo/TLT	Total Forest Board Revenues	Total Upland Revenue wo/TLT	Total Upland & Aquatic Revenues wo/TLT
1972		42,167	6,741	48,908	49,761
1973		61,372	10,739	72,111	72,930
1974		57,681	7,651	65,331	66,186
1975		51,957	8,257	60,214	61,152
1976		62,307	11,831	74,138	75,284
1977		114,833	18,546	133,379	134,796
1978	2/	96,401	17,821	114,222	116,301
1979	2/	127,188	23,542	150,730	153,273
1980	2/	144,319	28,890	173,209	175,454
1981	2/	93,167	20,869	114,035	116,997
1982	2/	140,453	24,096	164,550	168,220
1983	2/	96,121	27,670	123,791	126,490
1984		89,246	25,687	114,932	118,263
1985		95,835	33,369	129,204	132,161
1986		98,525	29,007	127,532	130,991
1987		109,203	35,709	144,912	148,776
1988	2/	129,110	52,283	181,393	186,446
1989		157,617	59,764	217,380	223,047
1990	4/	261,081	65,898	326,979	333,205
1991	4/	219,552	59,817	279,369	285,739
1992	4/	131,238	58,470	189,708	197,015
1993	3/, 4/	146,726	70,364	217,090	227,274
1994	4/	93,614	48,517	142,131	155,361
1995	4/	150,397	75,514	225,911	235,949
1996	5/	159,592	132,019	291,611	303,731
1997	5/	171,416	142,643	314,059	328,036
1998	2A/, 4/, 5/	138,026	104,410	242,436	255,971
1999	2A/, 4/, 5/	152,563	128,135	280,698	294,345
2000	2A/, 4/, 5/	152,040	103,799	255,839	272,611
2001	2A/, 4/, 5/	130,682	83,888	214,570	227,725
2002	2A/, 4/, 5/	100,162	75,869	176,032	191,944
2003	2A/, 4/, 5/	106,972	78,248	185,219	203,548
2004	2A/, 4/, 5/	*115,832*	*94,236*	*210,068*	*227,806*

2004 values are preliminary and subject to change!

Notes: Values expressed in thousands of dollars.

Source: DNR Annual Financial Reports (without any CPI-U inflationary adjustments)

Uplands RMCA excludes Aquatic Lands and Land Bank; FDA excludes Land Bank.

2/ Deduction suspended from some trusts for all or parts of these years.

2A/ Per BNR resolution 97-919 the deduction on forest board transfer revenues was reduced to 22% effective July 1, 1997 (fiscal year 1998)

3/ Uplands RMCA Excludes $5.9 million transfer from Park Land Trust Revolving Account to repay Land Bank.

4/ Beginning in fiscal year 1990, the Legislature has provided for the transfer of Common School trust lands for special lands protection and for transfer to State Parks.

5/ Includes pro rata share for TESC Capital Projects account effective fiscal year 1996.

Figure 1.5 Distribution of Revenues from Trust Lands – 1972-2004

Revenues for Management Funds (FDA, RMCA) and for Current and Permanent Funds within each upland Trust for Fiscal Years 1972 through 2004.

	Management Funds 1/		Common School, Indemnity and Escheat Trusts		Agricultural and Scientific Tru			University Trust		Normal School Trust		C.E.P. & Trust	Capitol Building Trust		Total Granted
						Agricultural			State	EWU, CWU,	Normal		Capitol	Forest	Trusts
Fiscal	Forest evelopment	Resource Management	Common School	Common School	.S.U. Bon	College	Scientific	U.W. Bonc	University	WU, TESC, pitol Projects	School	.E.P. & R	Building	Board	Revenue
Year	Account	Cost Account	Construction	Permanen	Retiremen	ermanen	ermanen	Retiremen	ermanen	Accounts	Permanen	Account	onstructio	Counties	wo/TLT
1972	1,750	10,289	19,833	733	69	791	216	3,595	365	59	3,900	575	1,743	4,991	42,167
1973	2,804	15,020	30,668	518	100	2,011	1,481	3,981	64	88	3,453	789	3,199	7,935	61,372
1974	2,003	14,086	29,288	777	121	1,772	3,061	4,295	12	81	2,055	614	1,519	5,647	57,681
1975	2,144	12,670	29,208	522	174	542	605	3,015	74	155	1,537	468	2,987	6,113	51,957
1976	3,065	15,153	31,785	1,144	184	238	1,510	6,227	113	122	2,414	984	2,434	8,766	62,307
1977	4,795	28,420	60,655	770	147	788	1,906	9,988	240	118	6,672	1,730	3,399	13,750	114,833
1978	4,655	21,502 2/	51,383	606	136	1,924	4,953	7,095	217	97	4,709	1,015	2,764	13,166	96,401
1979	6,082	10,517 2/	83,280	541	204	3,099	2,670	10,428	126	134	7,653	2,157	6,379	17,460	127,188
1980	7,238	28,079 2/	84,864	823	427	3,531	1,820	12,080	93	345	3,480	970	7,806	21,652	144,319
1981	4,988	13,864 2/	60,062	1,161	673	2,815	1,713	5,807	62	551	3,147	814	2,498	15,881	93,167
1982	8,524	20,472 2/	93,374	1,120	1,125	4,350	3,531	5,726	124	858	4,385	862	4,527	15,573	140,453
1983	8,163	21,326 2/	48,435	898	304	3,638	3,238	8,063	83	188	5,003	3,021	1,923	19,507	96,121
1984	8,116	22,576	43,321	810	238	2,166	2,569	3,871	425	57	7,784	1,820	3,608	17,571	89,246
1985	11,339	23,541	50,030	1,013	193	1,037	417	6,483	90	45	5,563	2,688	4,735	22,030	95,835
1986	8,216	24,635	54,837	998	184	1,937	1,500	3,396	472	35	4,790	1,476	4,266	20,791	98,525
1987	12,498	27,282	54,126	919	301	951	2,512	8,909	129	132	8,275	2,541	3,128	23,211	109,203
1988	16,772	12,609 2/	84,741	1,081	342	3,402	3,526	11,951	17	156	5,144	2,352	3,789	35,511	129,110
1989	18,840	37,932	86,090	1,172	281	3,882	3,484	6,410	1,387	120	6,480	3,270	7,108	40,924	157,617
1990	20,014	49,841	160,609 4/	1,073	390	6,239	6,754	7,934	-140	100	8,464	9,274	10,543	45,884	261,081
1991	17,791	33,456	147,444 4/	476	870	1,872	4,152	13,471	-456	588	5,773	5,571	6,334	42,026	219,552
1992	16,565	31,639	69,328 4/	534	335	4,335	2,898	4,435	849	49	7,226	4,614	4,996	41,905	131,238
1993	19,256	31,057 3/	90,457 4/	505	413	1,625	3,600	3,755	641	83	5,504	3,365	5,720	51,108	146,726
1994	13,971	24,630	50,927 4/	552	476	943	2,367	2,384	387	82	3,478	5,020	2,368	34,546	93,614
1995	23,130	30,681	95,486 4/	587	242	1,882	6,225	4,525	1,029	115	2,265	2,583	4,776	52,385	150,397
1996	36,061	42,097	84,824	787	471	5,484	6,961	1,810	2,139	107 5/	4,495	5,455	4,962	95,958	159,592
1997	38,879	43,870	84,408	992	452	4,445	7,950	2,534	2,790	95 5/	3,658	12,907	7,315	103,764	171,416
1998	25,728 2A/	34,284	70,790 4/	3,548	549	3,800	7,137	1,454	1,206	69 5/	3,316	5,547	6,327	78,682	138,026
1999	30,751 2A/	34,097	86,631 4/	817	525	3,832	7,549	1,829	1,982	74 5/	3,439	4,461	7,327	97,384	152,563
2000	25,023 2A/	31,896	90,179 4/	1,054	476	2,871	5,218	288	844	64 5/	5,397	5,386	8,369	78,776	152,040
2001	19,717 2A/	24,276	83,469 4/	743	580	1,400	4,517	1,147	573	101 5/	4,331	3,321	6,224	64,171	130,682
2002	18,737 2A/	22,476	52,897 4/	124	1,120	1,556	4,092	514	857	62 5/	4,102	4,602	7,759	57,133	100,162
2003	20,060 2A/	19,622	67,350 4/	525	643	2,628	3,348	780	85	58 5/	2,544	4,075	5,313	58,188	106,972
2004	*23,554 2A/*	*23,471*	*68,260 4/*	*506*	*835*	*3,643*	*3,250*	*572*	*435*	*65 5/*	*3,211*	*5,981*	*5,604*	*70,681*	*115,832*

2004 values are preliminary and subject to change!

Notes: Values expressed in thousands of dollars. **Source: DNR Annual Financial Reports (without any CPI-U inflationary adjustments)**

1/ RMCA excludes Aquatic Lands and Land Bank; FDA excludes Land Bank.

2/ Deduction suspended from some trusts for all or parts of these years.

2A/ Per BNR resolution 97-919 the deduction on forest board transfer revenues was reduced to 22% effective July 1, 1997 (fiscal year 1998)

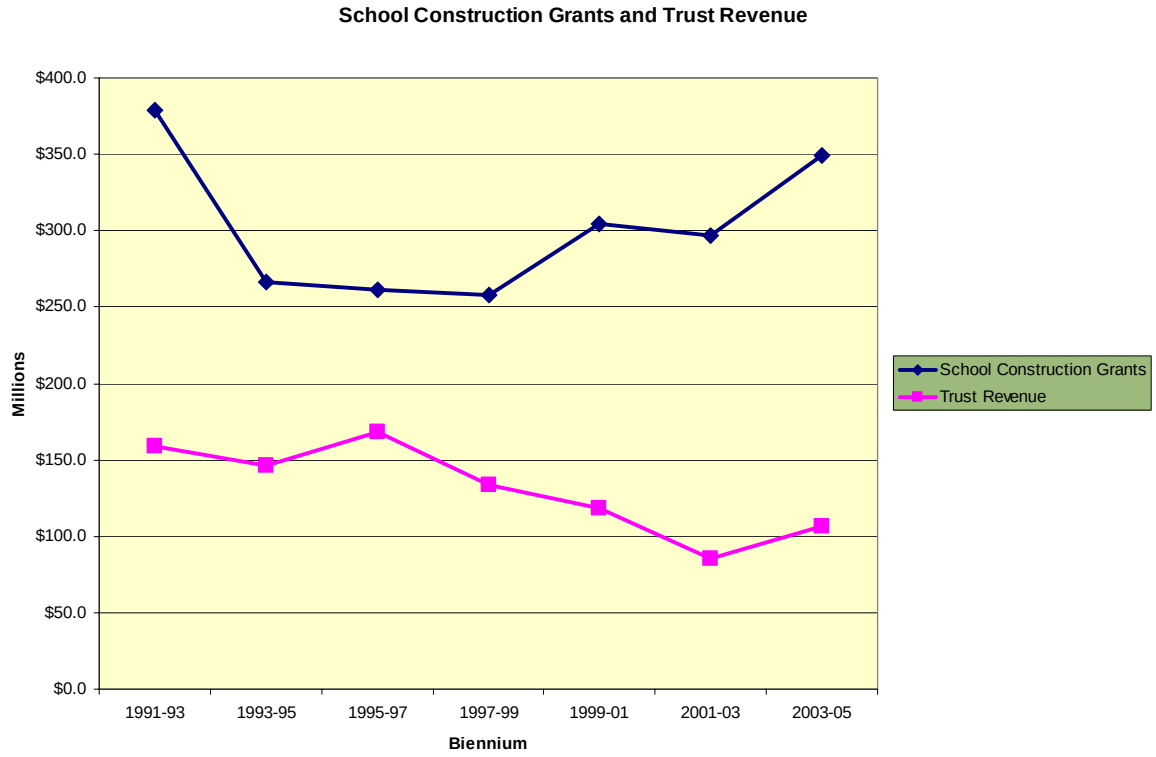
3/ Excludes $5.9 million transfer from Park Land Trust Revolving Account to repay Land Bank.

4/ Beginning in fiscal year 1990, the Legislature has provided for the transfer of Common School trust lands for special lands protection and for transfer to State Parks.

5/ Includes pro rata share for TESC Capital Projects account effective fiscal year 1996.

Figure 1.6 shows how the capital needs have varied over the last 14 years. The revenue from trust lands has provided significant offset of tax dollars for school construction that would have otherwise come from the general fund. During this period trust lands have contributed between 28 and 64 percent of the state funding for school construction.

Fig. 1.6 Revenue to the common school construction account compared with the total state share of school construction funding grants.

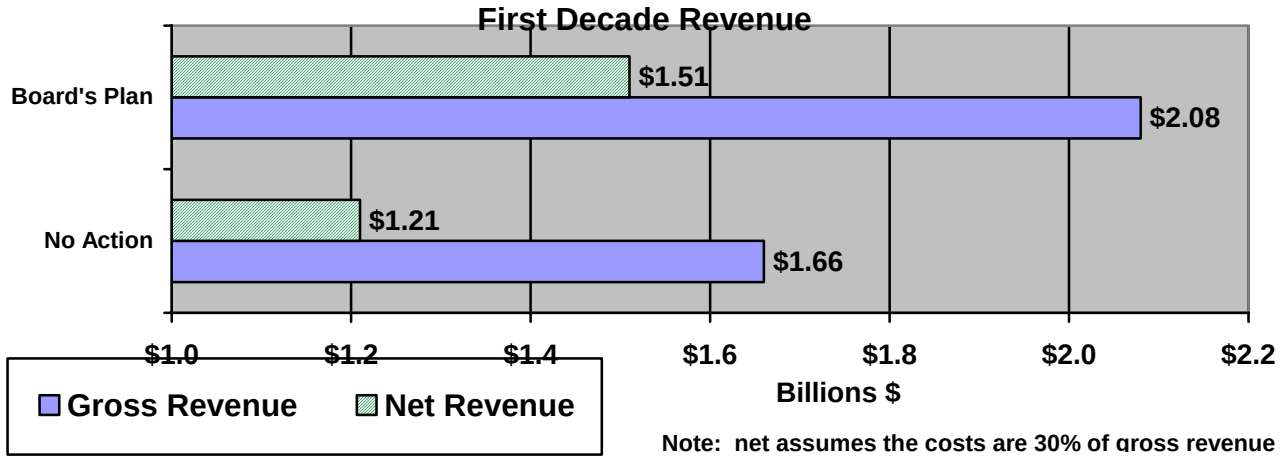


1.3 Proposed increase in management funds compared to annual beneficiary funding from trust accounts

DNR estimates it needs an additional $10 million per year to carry out the Board of Natural Resources direction to meet the sustainable timber harvest level. If that additional management funding were to be raised by raising the statutory management fee (only one possibility to be considered), the beneficiaries would receive a net increase in funding from implementing the Board's adopted plan. For instance, going from the 25 % deduction to the 30 % deduction would allow the department to implement the new sustainable harvest which when fully implemented would increase state wide harvest by 201 mmbf per year, mean annual for the first decade, compared to the 2004 sales level. Other funding solutions that supplement the current management fund are possible.

As shown in figure 1.7, under the new sustainable harvest level, beneficiaries will receive an additional $300 million in net revenue over the next decade.

Figure 1.7 First Decade Revenue Projected Under 2004 Sustainable Harvest Calculation for Western Washington State Trust Forests



Note: net assumes the costs are 30% of gross revenue

2. Lands and Resources

This section provides information to help answer the following questions and requests:

- Provide a breakdown of the trust lands in a way that provides a sense if the various categories of land value. (This might include forest site class, forest age class, forest diversification by management restriction, and forest and other asset classes.).
- What is the reason for the projected 45 percent growth in standing timber inventory over the life of the sustainable harvest calculation?
- Provide information about DNR's efforts to diversify the trust land assets, and the gains in value and/or return that result.

2.1 Total trust land inventory

The trust lands can be categorized according to land use. Using a geographical information system (GIS), DNR maintains a high quality inventory of the trust assets. Rather than present the more than 100 sub-categories for the upland trusts, a simplified scheme is used in Figure 2.1 to show how many acres of each trust are in each major land use group. Forests make up about 75 percent of the total acres of trust lands.

Figure 2.1 – All Upland Trust Acres by Land Use

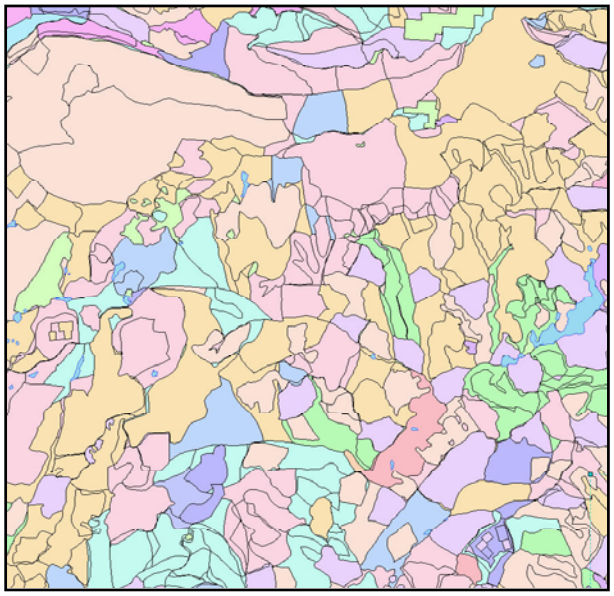
	Forest Board Transfer	Forest Board Purchase	Common School and Indemnity	Agricultural School	University - Transferred	CEP &RI	Capitol Grant	Normal School	Escheat	Scientific School	University - Original	Total
Land Use Category: Derived from DNR GIS data												
Agricultural	284	0	139,800	7,855	10,934	18,013	3,761	3,265	1,048	6,196	64	191,220
Grazing	95	0	402,632	4,557	17,105	9,724	1,106	2,782	969	3,965	30	442,964
Forest	520,074	76,854	1,095,529	56,734	55,137	40,108	99,811	57,125	4,066	68,711	1,742	2,075,891
Commercial Real Estate	13,298	99	37,797	817	3	996	667	74	488	500	1,045	55,784
Miscellaneous	12,370	2,428	66,167	774	623	1,042	3,426	978	280	1,737	14	89,839
Total	546,121	79,381	1,741,925	70,738	83,803	69,883	108,770	64,225	6,851	81,109	2,893	2,855,698

NOTE: *Miscellaneous* includes lands that may be in a variety of uses that includes rights of ways, roads, rock pits, and water bodies or recently acquired and not assigned a land use.

2.1.1 Forest Inventory

Understanding forest inventory is key to understanding the financial opportunities and ecological opportunities on forested state trust lands. Since the early 1990's, DNR has been collecting forest data in a detailed form, the Forest Resource Inventory System (FRIS). The FRIS data has replaced several decades of earlier, more generalized information and provides information on tree quality, quantities by grade and selected ecological data.

Figure 2.2 Representative FRIS Inventory Map



The major focus of the following information related to forest inventory focuses on western Washington trust lands and their relationship to the September 2004 Board of Natural Resources' decision for Sustainable Forest Management. However, about 0.7 million acres of the 2.1 million acres of forested trust lands are located in eastern Washington. Currently, there are about 8.5 billion board feet on eastern Washington trust lands. Relatively soon, DNR will start a process to calculate the Sustainable Forest Management harvest levels for lands east of the Cascade Mountains. Using previous calculations, eastern Washington harvest levels have been at the 80- 100 million board feet per year; the annual sales level varies due to significant forest health problems.

2.1.2 Use of an Appropriate Land Classification

A land classification scheme for the western Washington Sustainable Forestry calculation was developed to represent DNR policy goals and constraints. The classification places all trust forestlands into one of three classes based upon resource sensitivity and likely level of management intensity. The three classes in order of decreasing resource sensitivity and increasing level of management are:

1) Riparian and Wetlands – Riparian and wetland areas.

2) Uplands w/ Specific Objectives – Upland areas with location-specific resource sensitivities and/or operational management. Includes areas such as unstable slopes, rain-on-snow areas, and Northern spotted owl nesting roosting foraging and dispersal habitat;

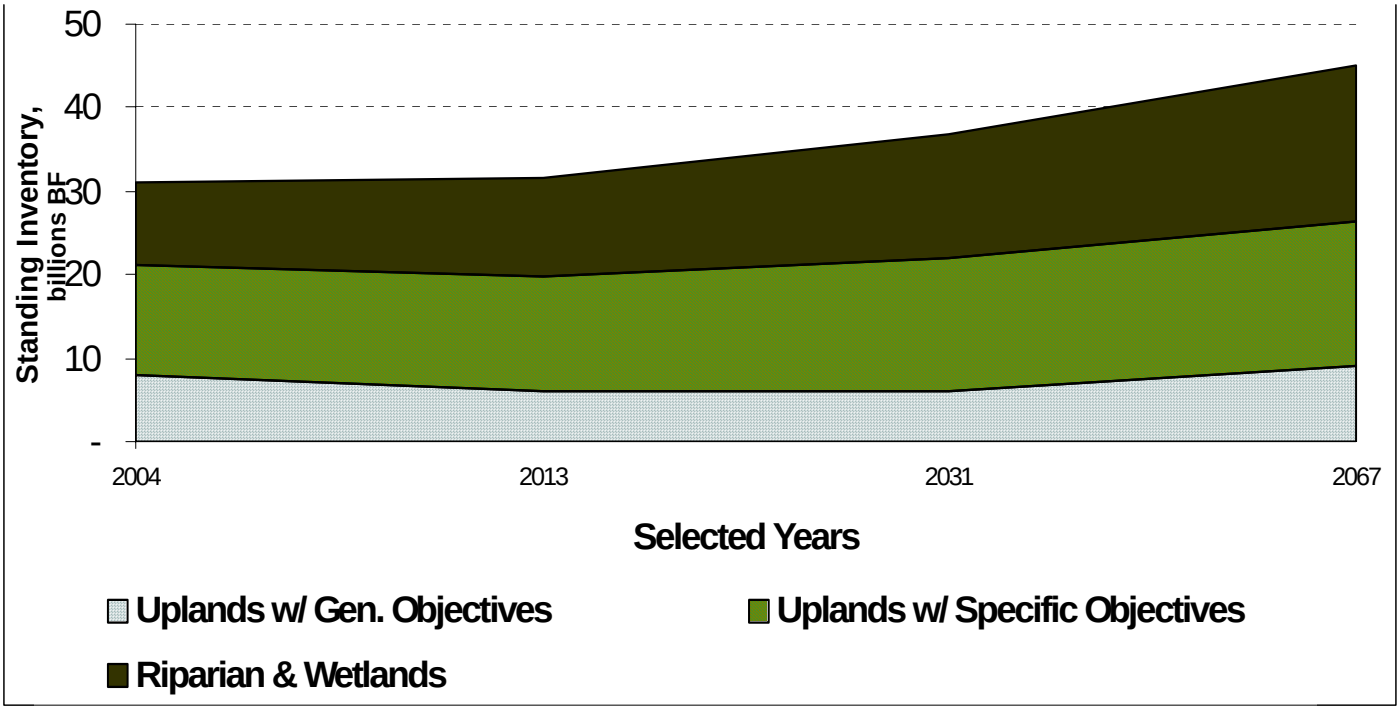
3) Uplands w/ General Objectives – Upland areas where DNR practices general ecological management practices such as legacy and reserve trees and green-up.

The current forest inventory has been placed into these same categories. These categories are useful in understanding how the HCP strategies change the landscapes over time. The terms of the contract (the HCP) specify certain habitat contributions in exchange for certainty, both certainty from the "take" penalties under the Endangered Species Act and operational certainty. The operational certainty and the ability to plan and budget brings predictability. In particular, the HCP has a "no surprises" policy that protects the trusts from many types of regulatory changes. Also, with the HCP, millions of dollars of survey costs for northern spotted owls are avoided every year.

Special management strategies for northern spotted owls apply to about 400,000 acres. The net result, over time, is to increase the amount of older forest habitat in these acres; the increase in older forest habat corresponds to an increase in standing volume.

Improving stream ecology and functioning is also a major HCP objective. Lands in the riparian (stream) management zones have lower levels of harvests that, over time, result in higher standing volumes.

Figure 2.3 Standing Inventory by Land Class, Preferred Alternative



The current western Washington inventory is 31 billion board feet. It will increase 45 percent (45%) by 2067 to 45 billion board feet. Essentially, all the increase in volume comes in the land classes necessary to meet the HCP contractual responsibilities or to meet the requirements of the State Forest Practices Act. The volume in the uplands with general management objectives stays fairly constant.

The Board of Natural Resources' Sustainable Forestry Plan specifies the nature and types of harvests. Figure 2.4 shows the projected harvests by land classification for the first decade.

Figure 2.4 First Decade, Western Washington Sustainable Harvests by Land Class

Land Classification	Mean Annual Volume, millions BF	Percentage
Riparian & Wetlands	48	8
Uplands w/ Specific Objectives	248	42
Uplands w/ General Objectives	301	50
Totals	**597**	**100**

The following figures show how the detailed land classifications apply to each specific trust. Figure 2.5 shows the distribution of the current inventory by trust and land class, and Figure 2.6 shows the current western Washington acres by trust by land class**.**

Figure 2.5 Current Western Washington Inventory Volumes by Trust and Land Class

	Data	LAND_CLASS		
	Million Board Feet			
TRUST	Riparian and Wetland Area	Uplands with Specific Objectives	Uplands with General Objectives	Total Million Board Feet
Agricultural School	218	272	171	660
Capitol Grant	788	928	398	2,114
Charitable/Educational/Penal & Reformatory Institutions	209	216	237	662
Common School and Indemnity	3,358	4,354	1,998	9,710
Community College Forest Reserve	11	0	41	52
Escheat	15	27	21	63
Normal School	241	300	91	632
Scientific School	472	538	378	1,389
State Forest Board Purchase	563	521	773	1,856
State Forest Board Transfer	3,396	4,814	3,117	11,326
University -– Original	16	33	6	56
University -– Transferred	319	363	142	824
Administrative Site	1	10	1	11
C.E.P.& R.I. Transferred	0	3		3
Land Bank	1	0	0	1
Natural Area Preserve	63	131	34	228
Natural Resources Conservation Area	276	640	35	950
Water Pollution Control Division Trust Land	7	21	22	50
Grand Total	**9,953**	**13,171**	**7,465**	**30,588**

Figure 2.6 Current Western Washington Acres by Trust and Land Class

TRUST	AREA			Total AREA
	Riparian and Wetland Area	Uplands with Specific Objectives	Uplands with General Objectives	
Agricultural School	**8,644**	**11,148**	**6,418**	**26,210**
Capitol Grant	**29,766**	**37,885**	**17,809**	**85,460**
Charitable/Educational/Penal & Reformatory Instit.	**7,635**	**8,326**	**10,849**	**26,810**
Common School and Indemnity	**171,673**	**229,317**	**103,726**	**504,716**
Community College Forest Reserve	**650**	**14**	**2,414**	**3,079**
Escheat	**994**	**1,484**	**1,114**	**3,592**
Normal School	**11,539**	**16,630**	**4,379**	**32,549**
Scientific School	**16,623**	**21,013**	**15,359**	**52,995**
State Forest Board Purchase	**20,102**	**16,954**	**36,244**	**73,300**
State Forest Board Transfer	**131,743**	**203,628**	**154,935**	**490,306**
University –- Original	**603**	**1,617**	**357**	**2,576**
University - Transferred	**13,673**	**20,202**	**4,679**	**38,554**
Administrative Site	**37**	**370**	**31**	**438**
C.E.P.& R.I. Transferred	**3**	**233**		**236**
Land Bank	**38**	**8**	**30**	**76**
Natural Area Preserve	**2,240**	**3,598**	**1,447**	**7,286**
Natural Resources Conservation Area	**10,210**	**26,891**	**1,501**	**38,601**
Water Pollution Control Division Trust Land	**552**	**1,930**	**1,414**	**3,896**
Grand Total	**426,726**	**601,248**	**362,706**	**1,390,680**

2.2 Forest productivity – a measurement of tree growth potential

Forest productivity is traditionally measured by what is called “site class.” Site classes are labeled I, II, III, IV and V—the smaller the number, the greater the productivity. In western Washington, a tree on Site I will grow to greater than 135 feet tall in 50 years while a site V tree will be less than 75 feet in 50 years. Not only are the trees taller on better sites, they also will be larger in diameter; the net result is that better sites have considerably more merchantable volume than poorer sites.

Figure 2.7 shows the distribution of site classes by trust for western Washington. Eastern Washington is not shown but the sites there are substantially less productive than the trust lands in western Washington.

Figure 2.7 Site Class Distribution for Western Washington Trust Lands

	ACRES BY SITE CLASS					
TRUST	**I**	**II**	**III**	**IV**	**V**	**Grand Total**
Agricultural School	854	8,029	12,147	4,832	348	26,210
Capitol Grant	4,867	23,390	43,406	11,786	2,011	85,460
Charitable/Educational/Penal & Reformatory Institutions.	1,456	11,947	9,305	3,162	941	26,810
Common School and Indemnity	14,187	124,433	220,420	115,918	29,758	504,716
Community College Forest Reserve	896	1,856	304	23		3,079
Escheat	103	1,179	1,316	858	136	3,592
Normal School	630	6,984	14,562	6,395	3,978	32,549
Scientific School	907	15,270	27,294	8,623	901	52,995
State Forest Board Purchase	3,367	43,689	22,508	3,545	192	73,300
State Forest Board Transfer	24,891	156,696	216,183	78,973	13,563	490,306
University –- Original	118	1,043	1,168	243	5	2,576
University –- Transferred	1,384	13,097	22,163	826	1,084	38,554
C.E.P.& R.I. Transferred		11	55	170		236
Natural Area Preserve	9	536	3,576	2,822	343	7,286
Natural Resources Conservation Area	3	2,469	11,036	10,075	15,019	38,601
Water Pollution Control Division Trust Land	19	742	1,534	1,409	191	3,896
Grand Total	53,690	411,371	606,976	249,657	68,471	1,390,166

2.3 Diversification – trust land transactions and improvements to the asset base

DNR uses land transactions – sales, transfers, purchases, and exchanges – to maintain and improve the quality, value, and productive capability of the state trust land assets. In general, the goal is to dispose of properties that are unproductive or underperforming and replace them with others of higher quality and better capacity to produce income for trust beneficiaries for both the short and long term. Many of the properties identified for disposal have attained higher-and-better-use characteristics, which may increase their value but render them unsuitable for resource management by DNR. The Trust Land Transfer program funds the transfer of lands with special ecological values out of trust ownership and funds their replacement with assets that are income-producing.

The trust land base is strongly dominated by forestry holdings (both in terms of acreage and value), so diversifying over time into other asset classes is a key goal in selecting replacement properties. DNR's repositioning strategy aims to reduce risk and increase prospects for immediate income, typically through agricultural and commercial property leases. The internal DNR Asset Management Council directed that for FY 2003-2005, one third of acquisition funds should be used to purchase commercial agriculture properties, one third for commercial properties, and one third for protecting and enhancing existing assets (by purchasing in-holdings within forest blocks, making infrastructure investments, etc.).

In addition to diversifying into non-forestry asset classes, DNR uses transactions to upgrade holdings within asset classes to subclasses with higher rates of return. For example, low value/low return agricultural and grazing lands have been sold, and vineyards and farms producing high value crops have been acquired.

DNR has sought and achieved improvements in planning and executing transactions. Within the past three years DNR Regions conducted inventories and assessments of the lands within their borders, identifying possible areas for property disposals and acquisitions. This input has been consolidated into a statewide view which, when finalized, will contribute to setting transaction priorities. DNR makes extensive use of its Internet web site to market trust lands, including commercial properties. It achieved wider outreach and cost efficiency in marketing and auctioning a number of scattered properties in Grant County through a single "batch sale" process, and is applying this approach in other geographic areas.

Figure 2.8 Trust Land Transactions by Asset Class – FY 1984 to FY 2004

	Acres Disposed	Value Disposed ***	Timber Value to Common Schools	Acres Acquired	Value Acquired
Ag/Grazing Management Grazing to Conservation Use	17,495 5,227	$3,610,335 728,900		11,331	$15,746,477
Commercial *	360	21,601,215		37	57,600,000
Forest Management Forest to Conservation Use **	21,935 45,361	162,438,424 32,241,300	 137,144,500	70,456	214,187,546
Higher & Better Use	9,440	53,402,725	31,812,000	364	27,400
Total	**99,818**	**274,022,899**	**168,956,500**	**82,189**	**$287,561,423**

* Disposals are primarily undeveloped commercial acreage; acquisitions are developed commercial properties.
** Forest to Conservation Use value disposed includes Trust Land Transfer timber value deposited in Common School Construction Account.
*** Monies received from disposal of trust land are used to purchase replacement properties, which may be in any of the asset classes. Disposal from a particular asset class are not necessarily reinvested in the same asset class.

Figure 2.9 Improved Revenue – Transactions Completed July 1, 2003-June 30, 2004

	Disposals	Acquisitions
Market value	$16,654,220	$10,367,222
Average annual return	$3,100	$711,000
Rate of return	<1%	$6.9%

Figure 2.10 Trust Land Transfer Summary – 1989-2005

Total appropriation	$422,352,000	100%
Common School Construction Account deposits (timber value)	$348,496,720	82.5%
Land transferred: • Value • Acres • Value/acre	 $65,402,000 75,139 $870	
Replacement land: • Value • Acres • Value/acre	 $58,413,636 34,632 $1,687	15.5%
Administrative costs	$8,453,280	2%

In a 2003 Report to the Legislature, DNR compared returns to trust beneficiaries from permanent fund investments with those from investing in replacement trust lands. Adjustments were made to account for differences in the department's investment analysis for forest, agriculture and commercial properties and inflation, and to remove the management fund deduction from beneficiary returns to allow proper comparison to the permanent fund returns. The average real return on replacement property was weighted to reflect the actual proportionate dollar investments since 1998 in forestland (44%), agricultural land (2%) and commercial properties (54%).

The projected real return to beneficiaries of 5.0 percent from purchase of replacement trust properties since 1989 is 32 percent greater than the comparable real return to beneficiaries of 3.7 percent from the permanent fund.

Figure 2.11 Comparison of Returns on Investments

	Gross Nominal Return	Loss in Purchasing Power	Gross Real Return	Less 25% RMCA	Net Real Return
Real Property Purchases					
Forestry			6.0%	1.5%	4.5%
Agriculture			10.5%	2.6%	7.8%
Commercial	10.1%	-3.1%	7.1%	1.8%	5.3%
Weighted Average			6.7%	1.7%	5.0%
Permanent Fund	6.8%	-3.1%			3.7%

This table originally appeared in the Department of Natural Resources Report to the Legislature: "Options for Increasing Revenues to the Trusts: Comparison of Returns from Investing in Real Property and in Permanent Funds," Table 16, p. 51

3. DNR Management Costs

This section provides information to help answer the following questions and requests:

- Provide detail on what categories of expenditures are made from the trust management funds.
- Provide detail on how the proposed increase in management funds would be spent to carry out the Board of Natural Resources' direction.
- What is the relation of fund balance trends to volume trends projected for the future?
- Provide details on reductions already made.
- Provide information on the time period during which expenditures are projected to exceed revenues.
- Relate management fund expenditures to targets of expenditure also funded by non-management funds.

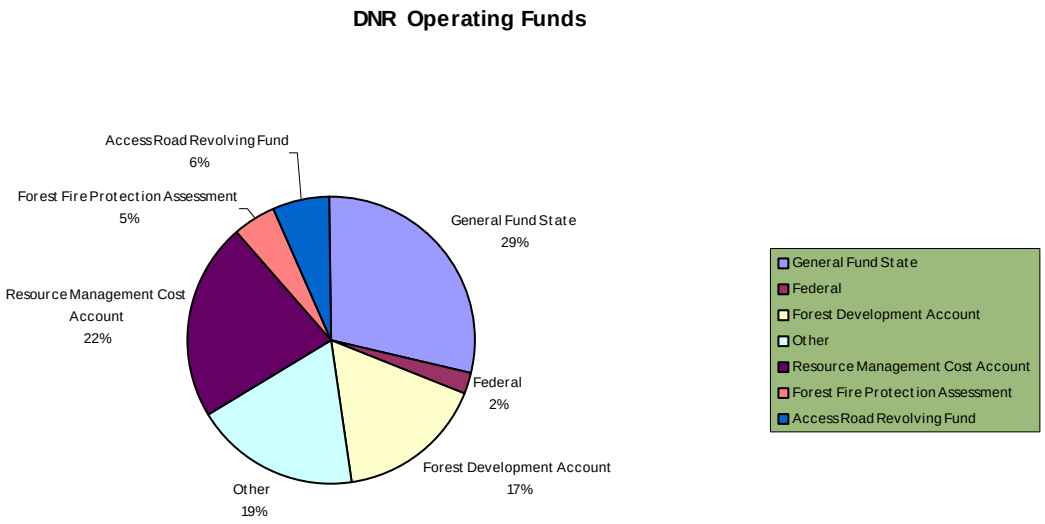
3.1 Budget overview and use of management funds

3.1.1 Legislative Allocation

DNR operates from more than 20 operating and capital accounts. For the 2003-2005 Biennium, the department’s operating budget allocation was $291 million.

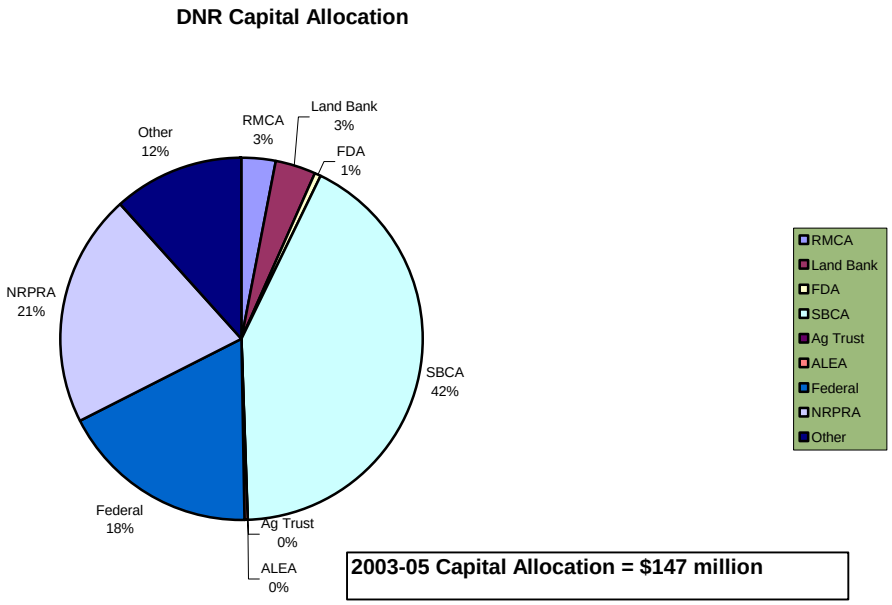
The use of all of these funds, except the state General Fund is restricted by statute. Some of the state General Fund appropriation is restricted by legislative proviso for specific purposes.

Figure 3.1 Source and Proportion of DNR Operating Funds



DNR also receives a Capital Budget allocation totaling $147 million. The largest source of Capital funds is general fund bond money from the State Building Construction Account (SBCA). Most of the SBCA funds, $55 of $62 million, are for the Trust Land Transfer program. Federal funds account for $26 million or 18%. The Natural Resources Real Property Replacement Account ($31 million or 21%) and the Land Bank ($5 million or 3%) are funds into which DNR deposits the value of trust lands sold. These funds are used to purchase new trust assets.

Figure: 3.2 Source and proportion of DNR Capital Allocation

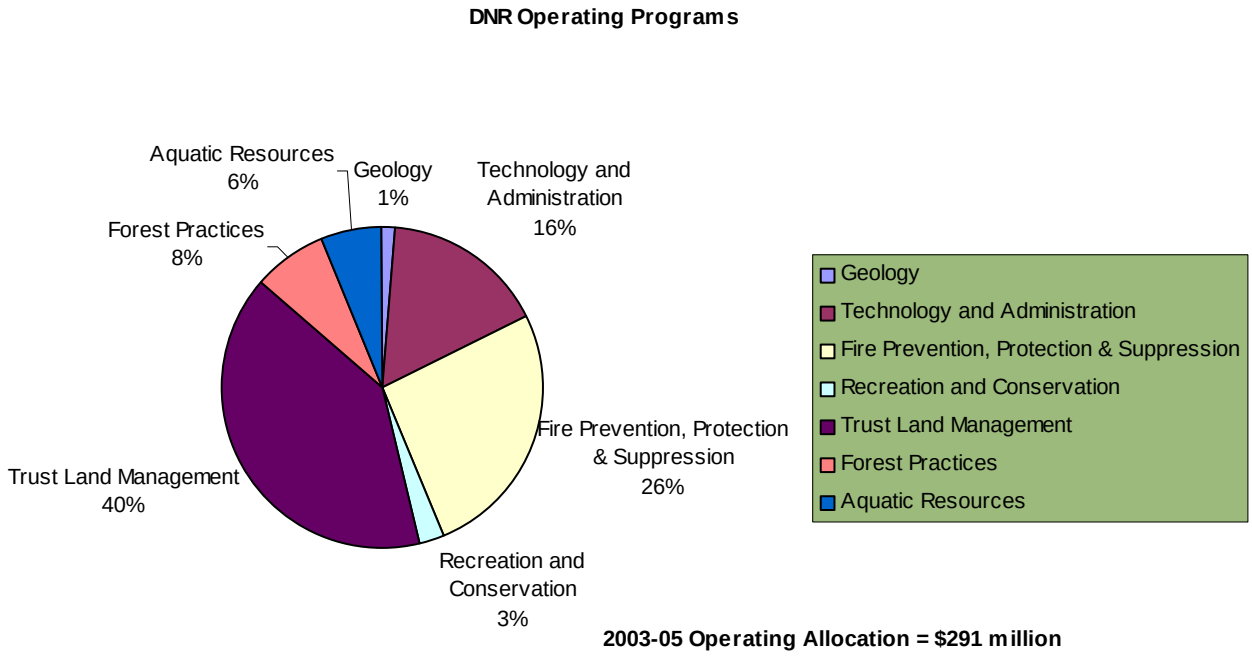


3.1.2 DNR Operating Programs

DNR has operates within seven basic function (program) areas. Each of these program areas is uniquely funded.

The largest program is Trust Land Management, which includes parts of four operating divisions and six regions. Trust Land Management is primarily funded from the distribution of revenue earned on granted trust lands and state forestlands. The management funds used are the Resource Management Cost Account (RMCA) and the Forest Development Account (FDA), respectively. In addition, the State General Fund pays for the management of the Agricultural Trust, though the Agricultural College Trust Management Account.

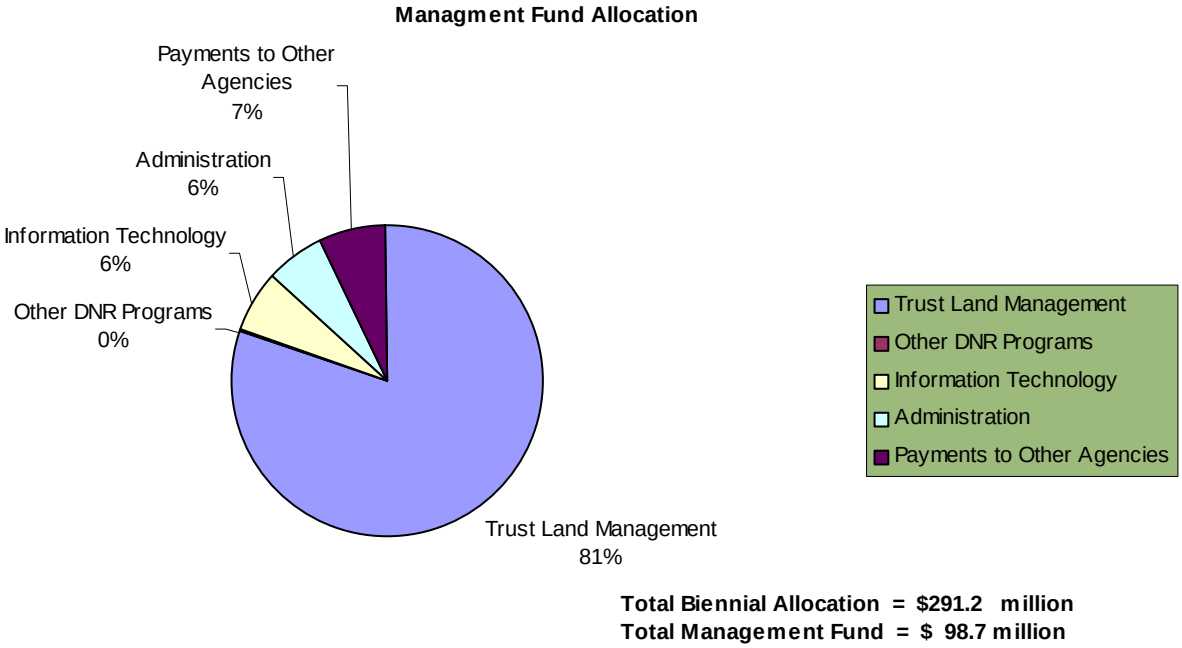
Figure 3.3 Distribution of 2003-05 Operating Allocation to DNR Programs



3.1.3 Allocation of Management Funds Within DNR

Of DNR's $291 million 2003-2005 biennial allocation, $98.7 million is from the RMCA and FDA management funds. This biennium, 81 percent of the management funds are allocated to the direct service Trust Land Management programs. The three overhead areas receive 19 percent. The other DNR Programs are allocated less than $400,000 in management funds, or 0.4 percent.

Figure 3.4 Allocation of Management Funds within DNR

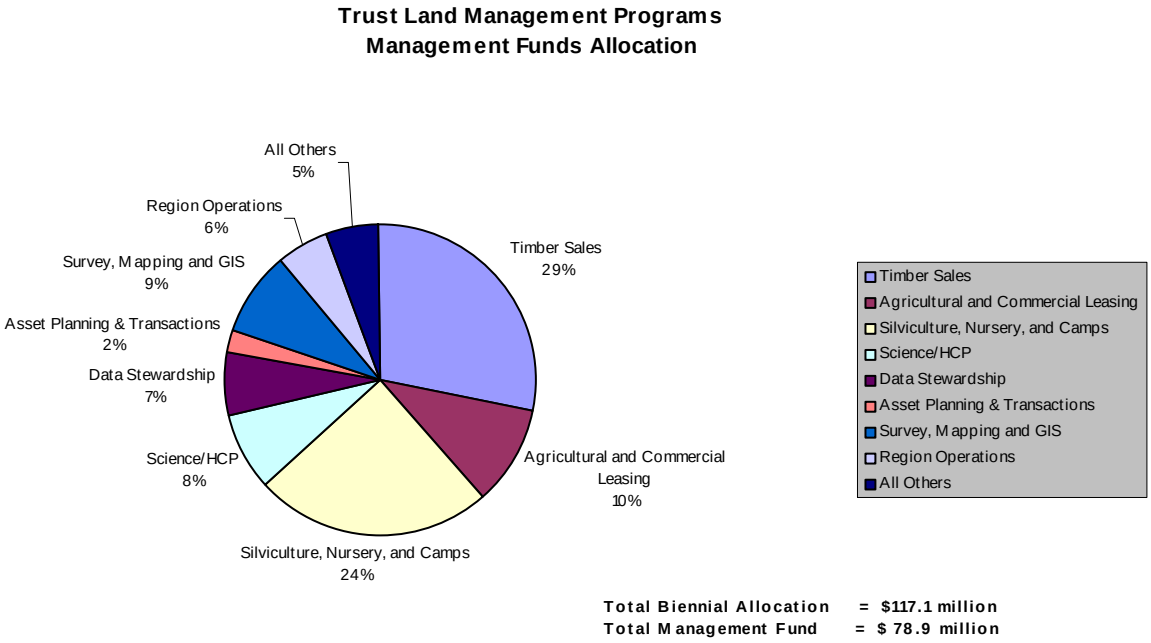


Total Biennial Allocation = $291.2 million
Total Management Fund = $ 98.7 million

3.1.4 The "Trust Land Management" Component of the Management Fund Allocation

Trust Land Management is a $117 million program. Management funds account for $79 million. The two largest programs in terms of the management fund allocation are Timber Sales (29 percent) and Silvicultural activities (24 percent). The management of Agricultural and Commercial Leases accounts for 10 percent.

Figure 3.5 Trust Land Management Programs Management Funds Allocation



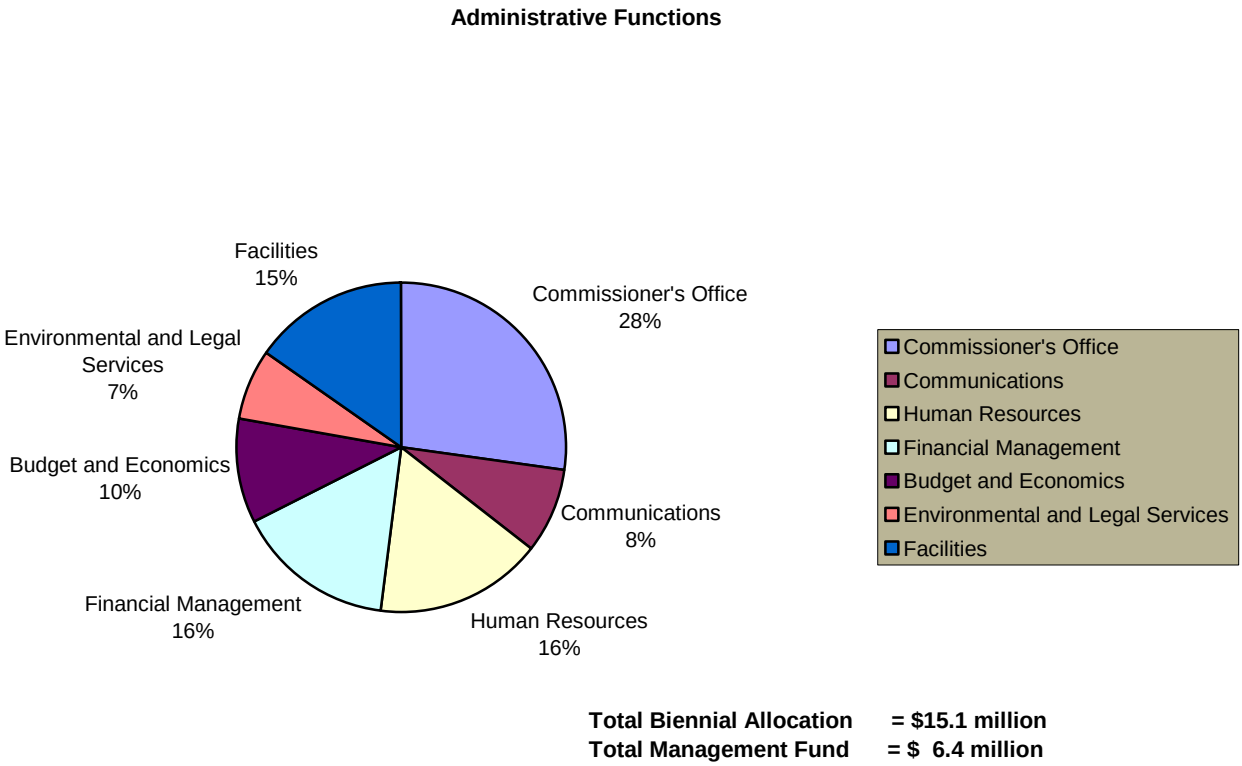
Several of the programs within the Trust Land Management program operate from dedicated funds such as the Nursery Account, Access Road Revolving Fund, and Survey and Maps Account.

3.1.5 The "Administration" and "Payment to Other Agencies" Component of the Management Fund Allocation

The "Administration" component includes what many organizations would call "overhead" services— departments such as human resources, finance and budget, executive offices and communications and facilities. DNR's overhead also includes the Environmental and Legal Services office, which responds to public disclosure requests and monitors and assists in SEPA compliance and EIS development.

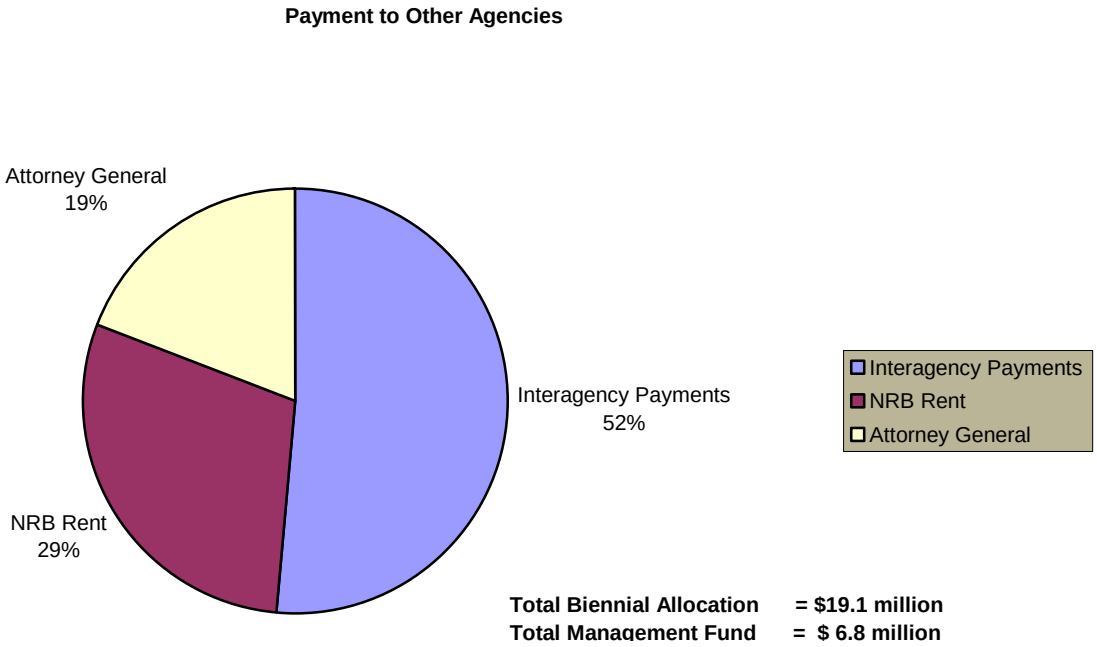
DNR is also billed by a number of other agencies for their services. These include the departments of Personnel, General Administration, Information Services and offices such as Minority and Business Enterprises and Office of Financial Management. This "Payment to Other Agencies" component also includes the allocation for rent and attorney general services.

Figure 3.6 Administrative Functions



Total Biennial Allocation = $15.1 million
Total Management Fund = $ 6.4 million

Figure 3.7 Payment to Other Agencies



3.1.6 Allocation of Management Funds for Public Access and Recreation

Figure 3.3 shows "Other DNR Programs" as 0 percent of the management fund allocation but shows a small sliver on the pie chart. These other programs include aquatics resources, resource protection (fire), forest practices, geology, and natural areas and recreation. There is no management fund allocation in any of these programs except for natural areas and recreation.

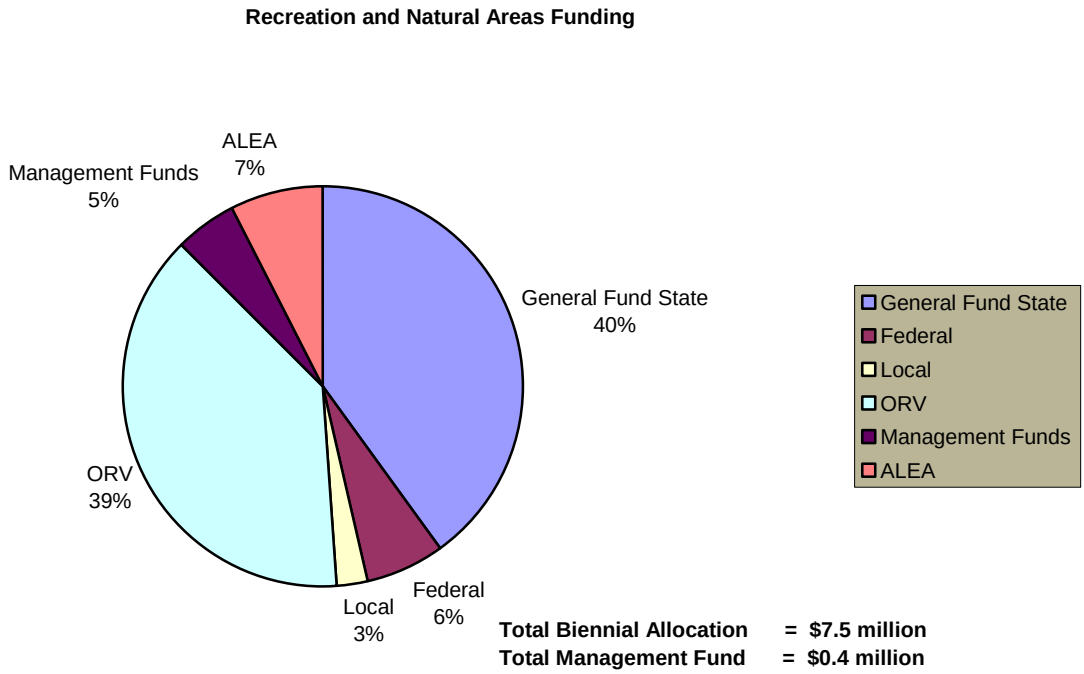
Natural Areas and Recreation programs have a small, $381,000, management fund allocation. This allocation is 0.4 percent of the total management fund allocation.

- The Natural Heritage program receives $200,000 for services it provides to the trusts —identifying unique animal and plants specifies on state lands.
- The Recreation program is allocated $181,000 to manage the typical landowner costs from deleterious public impacts such as hazardous waste and meth lab clean up; abandoned vehicles; and garbage removal. No trust dollars are allocated to support public access under the Multiple Use Act. Incidental costs are incurred. Incidental costs for roads maintenance stemming from general public driving on trust roads may be borne by the trust, but this assumed cost has not been quantified.
- The Natural Areas program does not receive a management fund allocation.

The Natural Areas and Recreation programs are primarily funded from the state general fund (40 percent) and the Off Road Vehicle Account (ORV) (39 percent). In addition, the Recreation program receives roughly $3 million biennially from grants from the Non-highway Off Road Vehicle Account (NOVA) administered by the Interagency Committee for

Outdoor Recreation (IAC). These grants provide for education, enforcement, maintenance and operations of recreation sites and 110 miles of trails across the state.

Figure 3.8 Recreation and Natural Areas Funding



3.2 How the proposed increase in management funds would be spent to carry out the Board of Natural Resources' direction

DNR has begun the process to bring on staff to implement the board action for sustainable harvest. In FY05, 26 additional staff will be added in our six upland regions. Additional staff will be phased-in each of the next three fiscal years until 95 new FTE have been added by FY08. Of these staff, 75 will be in the regions. The remaining staff will be allocated agency support, Financial Management, and Information Technology, GIS support.

3.3 The relation of fund balance trends to volume trends projected for the future

The RMCA and FDA expenditures will exceed revenues in the current biennium and in each of the following five biennia. The follow charts assume that DNR will meet the expectations set forth by the board action for sustainable harvest and also assume that the management fund share will remain at 25%. This information is also available in Table 4.4, Page 39, in Volume 1 of the Briefing Materials for the Independent Review Committee.

The impact on the fund balance for the RMCA and FDA are shown in the figure 3.11

Figure 3.9 RMCA Revenue Vs. Expenditure

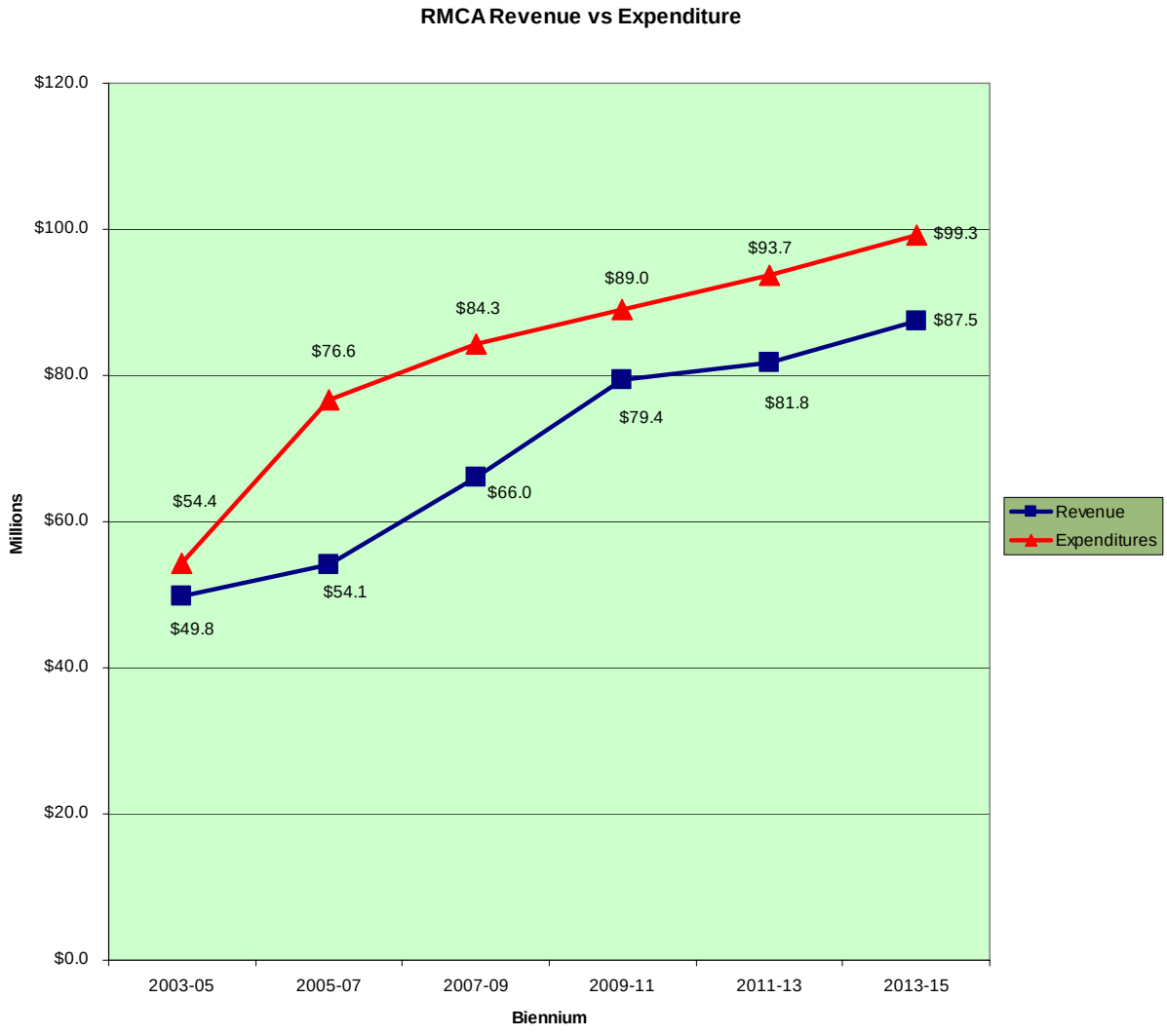


Figure 3.10 FDA Revenue Vs. Expenditure

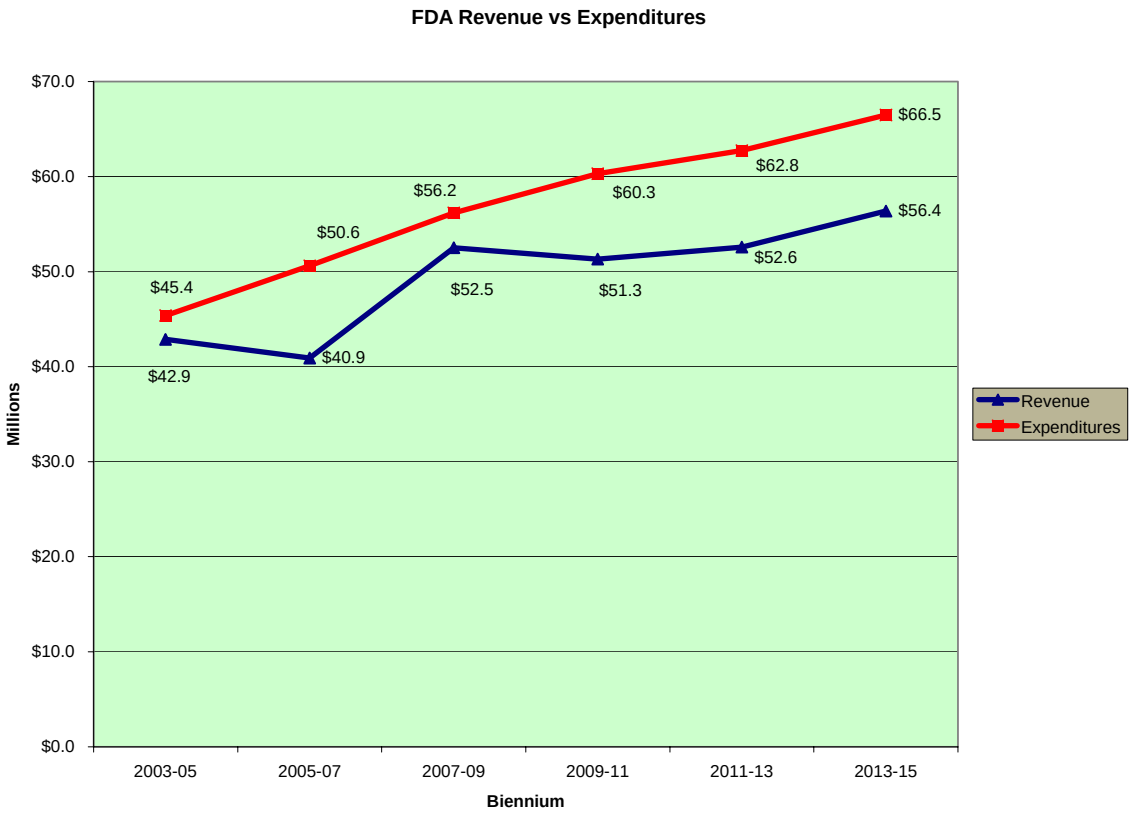
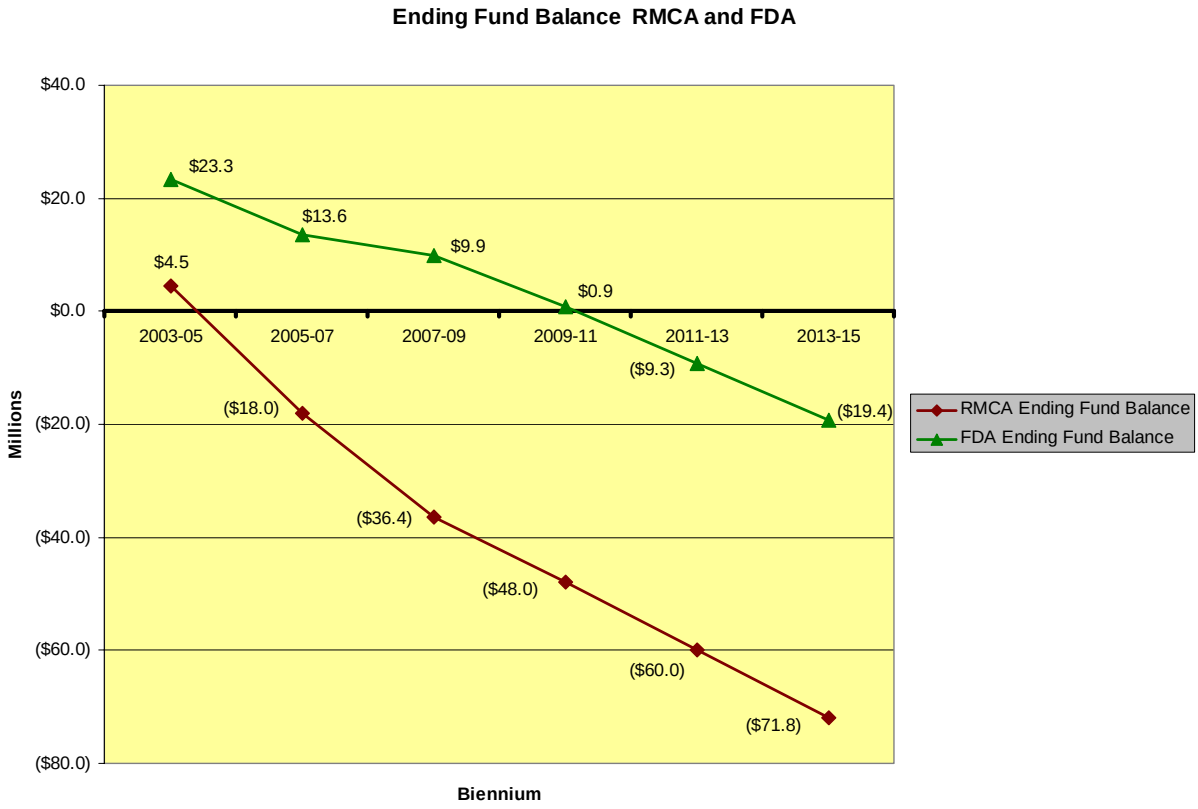


Figure 3.11 Ending Fund Balance RMCA and FDA



3.4 Reductions already made

The 01-03 biennial operating and capital budgets assumed the following:

- Management fund expenditures $165.8 million
- Management fund revenues $175.5 million
- Beginning fund balance (7/1/01) $ 47.3 million
- Ending fund balance (6/30/03) $ 40.7 million

In early spring 2001, DNR was spending at a rate that would have resulted in $144.7 million operating expenditures during the forthcoming 2001-2003 biennium. The revenue estimate was reduced in the March 2001 forecast to $100.9 million for the upland management funds. The draw down on the fund balance would have exceeded $43 million. The adjusted ending fund balance would have been negative.

In May 2001, DNR set a target biennial operating expenditure level at $110.2 million, reducing the expenditure rate by $34 million.

In July 2001, the department set the allotments at $112.9 million, or roughly $32 million below the previously identified expenditure levels.

In November 2001, DNR eliminated approximately 200 positions. Fortunately, due to earlier management actions to slow down hiring, many of these positions were vacant. Management

intervention to help place individuals at risk of reduction-in-force (RIF) significantly reduced the number of employees actually laid off to nine.

In the 2002 supplemental budget, DNR voluntarily reduced its management fund appropriation by $10 million. The supplemental budget also directed that the department reduce its General Fund-State (GFS) appropriation by $6.5 million. The General Fund reductions in the administrative programs resulted in additional management fund savings.

In April 2002, DNR continued its efforts to reduce management fund expenditures, particularly from the RMCA. At this point the projected ending fund balance for the RMCA at June 30, 2005 was negative at ($13.2) million. The department took actions to:

- Reduce RMCA operating expenditures by $3.6 million over three years.
- Reduce RMCA capital expenditures by $3.0 million in FY2004-2005.
- Administrative services reductions reduced management fund expenditures roughly $1.0 million per year.

3.4.1 Impact of Cost Savings

- RMCA expenditures in real dollar terms, adjusted for inflation, are at the lowest level since 1970.
- Total state land management expenditures are 26 percent below the level in 2001.
- Product sales expenditures are 22 percent below the 2001 level.
- Total state land management Full Time Equivalents (FTEs -staffing level) are down from 458 in 2001 to 339 in 2004, or 24 percent.
- Product sales FTEs are down for 231 in 2001 to 176 in 2004, or 24 percent.
- Timber sales productivity (volume of sales per FTE) has increased 57 percent since 2001.
- Administrative services FTEs are down from 171 in 2001 to 147 in 2004, or 14 percent.

4. Others' Costs

This section provides information to help answer the following questions and requests:

- What information is available on cost of other organizations?
- What information is available on costs of private forest management companies for forestland management? How comparable are these costs to DNR costs?
- What information is available on costs of similar states for forest land management? How comparable are these costs to DNR costs?
- What information is available on costs of Grays Harbor County for forest land management? How comparable are these costs to DNR costs?

4.1 Comparability and data availability

The ability to compare or benchmark costs is an important element in the Independent Review. Comparative data is not always available. Particularly in the private sector, problems associated with proprietary data that create competitive advantages are very real. Concerns associated with anti-trust prosecution by the federal Department of Justice are additional realities not found in comparisons of costs associated with public sector land management.

A common problem with any comparison or benchmark, private or public sector, is comparability. There are three elements of comparability. The first element is cost accounting practices. This does not imply impropriety. All entities account for costs in various ways and use different cost allocation strategies. Federal or state taxes can substantially influence accounting objectives. As a public entity, DNR has no distortions due to taxes. Allocation of indirect and administrative/corporate costs are done in a variety of ways. If an entity has multiple functions, then millions of dollars of annual costs would have to be allocated to those various functions in some fashion.

The second element of comparability can be summarized as management objectives. Assets that are managed for near-term cash flow have different objectives than those managed for long-term goals. Correspondingly, assets held in a long-term fiduciary trust will not be managed the same as where quarterly returns dominate land management and accounting practices. The ability to quickly dispose of under performing assets and to creatively reinvest in high performance assets is a common tool for many private assets managers but it is not routinely available for publicly held assets.

The third, and final, element of compatibility can be important—access to markets. Many landowners operate in the full open market. Some landowners, including the trust lands, restrict their markets; this restriction can be voluntary or as a result of federal and/or state law. In particular, trust lands can only sell timber in the domestic market due to federal and state laws that do not directly apply to the private sector. The ability to receive a higher price in certain markets can increase revenue while reducing percent costs and improving the calculated rates of return.

4.2 Private sector comparisons

Given the previous discussions, it is hard to get direct or comparable data. DNR has discussed benchmarking with PWC, PricewaterhouseCoopers LLP. As noted on the company's web-site, "PricewaterhouseCoopers provides industry-focused assurance, tax and advisory services for public and private clients..."

Their *Global Forest and Paper Industry Survey*. 2004 edition based on 2003 results is available on the web: www.pwc.com/gx/eng/about/ind/forest/pwc_gfp_survey_2004.pdf. Because DNR did not participate in the 2003 survey with its associated confidentiality stipulations, we do not have access to the full set of data. However, the following information was provided by PWC: The information provides a picture that helps us understand some of the DNR costs while simultaneously demonstrating the complications of data comparability and availability.

Figure 4.1 Benchmark Comparisons of Certain Forest Management Costs

Western US Wood Cost Benchmarking Survey (2001 and 2002 data)

Special Report for US Department of Natural Resources

	Washington	Oregon
Average site preparation costs ($/ac)	$124.15	$122.66
Average planting costs ($/ac)	$259.54	$278.51
Pre-commercial thinning - manual ($/ac)	$109.99	$90.65
Forest inventory personnel (acres/fte)	32,003	21,196
Forest inventory costs fully loaded ($/ac)	$2.01	$1.23
Overhead costs (excluding forest inventory) ($/ac)	$6.30	$10.47

Notes:

1. Results are the simple averages of respondents' responses to the 2001 and 2002 questionnaires, except for forest inventory personnel data, which was not collected in 2001.
2. Extreme results have been excluded to avoid skewing the averages

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The following table takes the same categories, uses DNR costs and extends them to our scale[1] of operations.

Figure 4.2 Benchmark Costs versus DNR Costs

Cost Comparisons using PricewaterhouseCoopers data and DNR data

Activity	PWC Unit Costs	Average annual DNR Activity levels, acres 4 yr. Aver.	Projected costs using PWC as a base	DNR unit costs	Projected costs using DNR as a base	Cost Differences between PWC- DNR calculation
Site Preparation, $/ac	$124.15	4,350	$540,053	$104.92	$456,402	$83,651
Planting, $/ac	$259.54	15,520	$4,028,061	$140.00	$2,172,800	$1,855,261
Precommercial Thinning, $/ac	$109.99	10,390	$1,142,796	$140.43	$1,459,068	-$316,272
Inventory Costs, fully loaded, $/ac	$2.01	2,100,000	$4,221,000	$0.80	$1,680,000	$2,541,000
Overhead costs, w/o forest inventory, $/ac	$6.30	2,100,000	$13,230,000	$5.60	$11,760,000	$1,470,000
		Totals	**$23,161,909**		**$17,528,270**	**$5,633,640**

As Figure 4.2 shows, the benchmark differs from actual DNR data. DNR site preparation, planting, inventory and overhead costs are lower, while DNR precommercial thinning costs are higher. Assuming data comparability for these activities, overall DNR costs are 24 percent lower than the benchmark data when applied to DNR's scale of operation. To place this in context of the total annual DNR operating budget, $49.35 million, the $17.5 million is about one-third of the total. Benchmark data for the remaining two-thirds does not exist.

DNR believes that benchmarking can provide very useful information and is pursuing two benchmarking efforts. DNR plans to participate in the upcoming PWC 2004 benchmark study, and anticipates that it will enter into a contract early next year that will generate a report by the end of May 2005. The other effort DNR is pursuing is with Atterbury Consultants, Inc., Portland, Oregon is a well-respected forestry consultant. They intend to conduct a benchmark study of forest land management costs. While the study will be similar to PricewaterhouseCoopers' concepts, its design will be different. The Atterbury benchmark study will focus on some of the aspects that are regionally specific (Pacific Region, including Idaho and British Columbia). Importantly, their report should be completed by the end of this calendar year.

[1] The number of trust land acres and acres treated are then used to make comparisons.

Important Information

DNR discussed operating costs with one of the larger private Washington forest landowners. In some regards, their management objectives have some important similarities to trust land management. For reasons of confidentiality, the name of the company cannot be disclosed. The company is focused on forestland management for the long run, and is willing to have a longer-range view that recognizes that land management costs, expressed as percentage of gross revenue, vary substantially. Adjusted for a domestic-market-only percentage, their recent experiences are most informative.

Their percent of gross revenue used in land management ranged from a high of nearly forty percent down to just under thirty percent.

These were actual costs compared to fluctuating market revenues. This landowner does not deal with any costs that may be associated with the social obligations of the State Multiple Use Act or other laws that govern state land operations differently than the private sector. Further, it did not include the costs of managing nearly half-a-million acres of grazing lands or extensive eastern Washington timberlands. The private land managers have the opportunity to broadly and quickly reposition under-performing assets without the public policy obligations found in state government.

4.3 Comparisons with other states

Comparable data is often difficult to find. However, the Oregon Department of Forestry has published data regarding management expenditures for their Common School Forest Lands. As shown in their *Status of Common School Forest Land Management Fiscal Year 2004*, the percentage of revenue to expenditure was calculated. In FY 2004 it was 32.31 percent, while FY 2003 was 53.10 percent. Fiscal year 2002 and 2001 showed 30.93 percent and 24.30 percent respectively.

Figure 4.3 Comparison of Selected Western State's Trust Land Management Activities and Functions

	Wash. 1/	Oregon 2a/	Oregon 2b/	Idaho 3/	Montana 4/	Utah 5/	New Mexico 6/	Arizona 7/	Wyoming 8/
Trust Acres Managed	2,862,290 acres (upland only)	763,200 acres - State Lands (uplands only)	780,000 acres - Board of Forestry	2,463,863 acres	5,163,000 acres	3,445,000 acres	8,868,000 acres	9,279,243 acres	3,565,669 acres
Forest Acres	2,113,760 acres	133,000 acres (managed by ODF)	Same as above	1,019,816 acres					
No. of Trust Beneficiari	10	1 – Common school lands	1 - Co. Forest Trust Lands	9	10	12	22	13	17
Total Trust Revenues	$195,561,000	$30.5 million		$64,303,000	$62,595,000	$50,267,000	$263,135,000	$103,378,000	$66,310,900
Timber Sales Revenue	$143,393,000	$8,550,000	$86,816,831	$41,696,500	$6,915,000	$713,000	Mineral Royalties = $220,417,000		$797,600
Timber Harvest	494,266 MBF	24,310,MBF	253,637 MBF	170,191 MBF	44,500 MBF (42,200 annual sales level)				4,705 MBF
Funding Sources for Trust Mgmt	RMCA (federal grants); FDA (forest board); ACTMA – Ag. School Trust Mgmt. Acct. (GF-S)	Capital Imp. & Maint. Costs; Constitutional Expenses	Forest development fund	GF 29%; dedicated funds (5) 18%, federal funds 13%; endowment funds 40%	GF, Res.; Dev. Acct. 3%; For. Imp. Acct. (fees); Trust Admin. Acct. 5%	Self funded	Maintenance fund	GF	GF (78%), federal funds (15%), other state funds (7%)
Percent Retained by Mgmt	25% - RMCA; 22% - FDA	Cost reimbursable $4,423,336	29.36% (FY03)	10% - Forest Imp. Acct.	2.5% Res. Dev. Account except timber sales			0%	0%
Major Revenue Sources	Timber sales, leasing – agric., commercial, communication sites, other	Timber sales, grazing, ag. & misc. uses; property sales	Timber sales, rights-of-way, permits	Timber sales, leasing – agric., commercial, mineral, other	Ag/grazing; minerals, timber sales	Oil & gas, commercial, minerals, surface leases	Oil & gas rentals and royalties, grazing rents, misc. leases	Coal, oil, gas and mineral royalties & rents; agric. and grazing	Coal, oil, gas and mineral royalties & rents; agric. and grazing

	Wash. 1/	Oregon 2a/	Oregon 2b/	Idaho 3/	Montana 4/	Utah 5/	New Mexico 6/	Arizona 7/	Wyoming 8/
Costs of Land Manageme	$48,965,000	$10.3 million	$21,256,459	$13,373,700	$3,900,000	$9,397,000	$11,336,493		$6,839,160
Budget cycle	Biennial	Biennial	Biennial	Annual	Biennial				
Board involvement in budget	No review or approval prior to submittal to Legislature	Review and approved prior to submittal to Legislature	Review and approved prior to submittal to Legislature	Review and approved prior to submittal to Legislature	No review or approval prior to submittal to Legislature				

1/ Upland acres from Lands Managed by DNR Chart – July 2003. Percent retained on forest board transfer lands currently equals 22 percent, while on forest board purchase lands FDA retains 50 percent per statute. The deduction on forest board transfer lands could be increased to 25 percent per Board of Natural Resources action.

2a/ Source: Oregon Dept of State Lands Biennial Report and Status of Common School Forest Management Report for FY03 by the Oregon Dept. of Forestry (ODF), which manages approximately 133,000 CSL acres under contract for the Dept. of State Lands.

2b/ Source: Oregon Dept. of Forestry – State Forester's Report for Council of Forest Trust Land Counties. During FY03 $49,801,650 was distributed to the counties with forest trust lands.

3/ Source: Idaho Department of Lands Annual Report 2003.

4/ Source: Montana Department of Natural Resources and Conservation 2003 annual report for the Trust Land Management Division.

5/ Source: Utah School and Institutional Trust Lands Administration, Fiscal Year 2003 Report.

6/ Source: New Mexico State Land Office, Fiscal Year 2003 Report.

7/ Source: Arizona State Land Department, Annual Report 2003.

8/ Source: Wyoming Office of State Lands and Investments, Annual Report 2003.

The DNR is continuing to research this data and anticipates updating this section for the third Independent Review Committee meeting.

4.4 Comparison with Grays Harbor County

Discussions with representatives from the County have indicated that the *JLARC*[2] *Report 96-5 1996 Forest Board Transfer Lands* is considered the most current analysis of costs. By the time of the next meeting, we anticipate supplemental County information that may update this data.

The following material is copied from the cited JLARC Report.

[2] The Joint Legislative Audit and Review Committee (JLARC) was established by Chapter 44.28 RCW, to provide oversight of state funded programs and activity. Under the direction of the Legislative Auditor, JLARC conducts performance audits, program evaluations, sunset reviews, and other types of policy studies. Study reports typically focus on the efficiency and effectiveness of agency operations.

(Go to http://www1.leg.wa.gov/Reports/96-5.pdf for the complete report).

DNR's management fee percentage is similar to other public foresting agencies

We compared the percentage of DNR's management fee with Grays Harbor County and the states of Oregon and Idaho. The two states were selected for their proximity to Washington State, and also because besides Washington, they are the largest (in terms of revenue generated) managers of state timber trust lands. Grays Harbor County was selected because of the study mandate to compare DNR with to this county.[2] The following table illustrates these percentages:

State/County	Revenue Percent Retained as Management Fee[3]
Grays Harbor County	25%
Idaho	10%
Oregon	36.25%
Washington	25+%

The relative productivity of the land that is managed and the intensity of management efforts needed to make the land productive limit the usefulness of the comparison. For example, if the timberland in Oregon is only half as productive as Washington timberland, Oregon could have a higher management fee percentage, yet receive less revenue per acre in management fees.

[2] Grays Harbor County was the only county holder of timberland that did not convey their timberlands to the state.

[3] Information on the percentage management fee from Idaho and Oregon is from Souder and Fairfax, *State Trust Lands*, 1996, p.46. Information on the Grays Harbor County management fee provided by the Grays Harbor County Department of Forestry.

5. Cost Centers for Environmental Compliance

This section provides information to help answer the following questions and requests:

- What information is available to help understand the costs of compliance with environmental and other regulatory laws? In what way are these costs similar to or different from the costs of other commercial forest management organizations?

5.1 Comparing DNR to other landowners

As part of the Sustainable Forestry Calculation, the DNR analyzed various costs and management strategies. In August 2002 the DNR presented the Board of Natural Resources with an assessment of the revenue differences between various management strategies for western Washington trust lands. The DNR evaluated three different tiers.

The first tier was to assess the potential of the western Washington lands to grow timber. This is a baseline to evaluate how much of the productive capacity of the forest estate is dedicated to various policy or regulatory objectives.

The second was the Forest Practices tier. The objective was to assess how the trust lands could be managed under Forest Practices Rules and Law, without a HCP. In some ways, this approximates how a private landowner might manage forests under Forest Practices without a HCP. This should not be interpreted as an estimate of a realistic trust land management prescription due to distinct Endangered Species Act compliance obligations for trust lands. A comparison with the costs of others is difficult as noted elsewhere in this report. Above and beyond the issues of comparability and differences in management objectives, there are some unique geographical and forest habitat issues.

The proximity of DNR older forests to the federal lands designated for northern spotted owl management changes the patterns of northern spotted owl use on state lands. Northern spotted owl use of such trust lands is much higher than the average forestlands in Washington. The results are increased uncertainty as to where the owls may be from year to year. The regulatory response is to require repeated and costly northern spotted owl surveys. The movement of the owl in this habitat and the higher cost of surveys introduce a high degree of uncertainty and call for alternative strategies for risk management and predictability. A similar situation exists concerning another species. Almost no private forestlands were designated as federal critical habitat for the marbled murrelet; however, a disproportionate amount of state forestlands were given that destination.

Finally, the third tier valued the forest estate under the HCP, the Forest Resource Plan[3] and the applicable Forest Practices Rules and Law.

Net present value is a measure of today's value for the 1.4 million acres of land. All future costs and future revenues are discounted to a common point in time, 2002. The numbers

[3] The Forest Resource Plan is the current suite of Board policies that govern forest management on 2.1 million acres of forested trust lands.

should be seen as relatively accurate and do not constitute a formal appraisal. The numbers were valid in 2002. The purpose is helping understand the relative differences in the costs, assuming no changes in species listing or regulatory requirements occur in the 200-year period that would affect Forest Practices Rules. In contrast, the HCP has incidental take permits fro species not yet listed but expected in the 70-year plan's lifespan.

The analyses do not attempt to quantify the benefits of either the Forest Practices Rules/Law or the Habitat Conservation Plan. The use of the timber growth potential calculation is not to assert that it is legally feasible to manage trust lands without regard to federal and state environmental laws. Rather, the purpose was to help the Board of Natural Resources understand the magnitude of resources allocated to non-revenue functions.

A number of assumptions were necessary to evaluate the tiers. More complete information is available upon request.

5.2 Estimated results[4]

The difference between growing potential value and current management under the HCP is about $1.6 billion over a 200-year calculation period. This can be viewed as a proxy for the unavoidable costs of complying with state and federal environmental laws.

As a further comparison, the estimated difference is $0.7 billion over a 200 year calculation period between hypothetical management of trust lands under only Forest Practice rules (which would possibly not meet trust lands' obligations under the federal Endangered Species Act) and current management under the HCP. This could be viewed as the cost of the State's compliance with the federal ESA for state trust lands. See the closing paragraph of this section for a discussion on the benefits of having a HCP for trust lands.

[4] Information excerpted from a Board of Natural Resources Retreat presentation on August 28, 2002.

Figure 5.3 Estimated Results

	Tier 1: Timber Growth Potential	Tier 2: Forest Practices	Tier 3: DNR w/ FRP & HCP
Net Present Value (over 200 years @ 5% discount rate, in $ Billions)	$4.4	$3.5	$2.8

Given the advantages of the "no surprises" policy in the HCP, there are a number of benefits that are difficult to quantify. Included is incidental take coverage for any future listings during the term5 of the HCP. It is clear that the HCP brings additional environmental benefits that will reduce costs of future Endangered Species Act compliance. The HCP provides certainty and predictability not found in management simply based on the Forest Practices Rules and Law. The value of predictability and certainty is quite real but hard to quantify. Prior to the HCP the DNR spent millions of dollars per year for surveys. Finally, the cost of an ESA "take" can be quite large. One of the major objectives of the HCP is to reduce the risk of violating the ESA. There is no ESA coverage under Forest Practices.his section provides information to help answer the following questions and requests:
What savings might be possible with greater technology improvements?
What savings might be possible by merging trusts?
What other major barriers exist to realizing significant savings?

6. Possible Cost Savings

6.1 Savings and technology improvements

DNR business systems are currently heavily dependent on computer technology, particularly geographic information system (GIS) technology, in which DNR is a state leader. The agency is constantly seeking ways to improve efficiency through improved application of technology. Recent examples include:
The consolidation of two DNR regional organizations, predicated on the assumption that field staff with greater technology access in the field can work in larger geographic areas.
The current project to revamp the Revenue Management System, Timber Sales Contract System, and Asset Performance System, switching from older mainframe systems to a more easily supported Web-based technology.
The current request for a budget increase, to allow the agency to keep pace with our GIS vendor's planned transition to Windows-based software, which will place GIS data in the hands of the user and significantly decrease dependence on technical experts to feed information requests.

While all these efforts will result in a more efficient and effective organization, all take an initial investment, which generally must be approved by the Office of Financial Management

[5] The term of the HCP contract is through 2067 with the option of three 10-year extensions.

(OFM) and the legislature. DNR welcomes the Independent Review Committee's interest in discussing ways the agency can improve its business through technology improvements.

6.2 Savings and merging trusts

If it serves the interest of each trust, federally granted trust lands may be managed collectively as long as DNR maintains separate allocation and accounting of costs and expenses to each trust. See AGO 1996 No. 11, pp. 21-25. A complete "merger" that did not maintain separate trust funds would require a change in Washington State's Constitution and the federal Enabling Act, which set up the federally granted trusts as separate and distinct.

The State Forest Transfer lands, created by state statute, are a single trust that can be managed as a whole. See AGO 1996 No. 11, pp. 69, 70. However, under RCW 79.66.110, revenues are distributed to the county in which the land that produced the revenue is located. The county beneficiaries have generally not supported proposals to treat these "county trust" lands as a unified trust, due to the complexity of dividing up their respective "shares."

In the recently completed Sustainable Harvest EIS, one alternative was to combine all trusts into one unit for purposes of calculating a sustainable harvest level. This allows greater flexibility in assigning a given year's harvest among the various trusts' forest lands. The harvest level and economic performance of that alternative compared to the Board's selected approach is one proxy for this suggested savings measure. The Board's selected approach generally combines all federally granted trusts into one calculation unit, separates each county as a separate unit, and sets up two geographically separate calculation units.

The combined trust alternative was estimated to produce 663 MMBF of timber volume per year in the first decade, compared with the Board's selected approach, which will produce an average of 597 MMBF per year. This translates into approximately $165 million per year in trust revenue in decade one for the combined trust approach, compared to approximately $151 million per year for the selected approach. The Board did not select the combined trust approach because of its much greater timber volume and revenue fluctuations from year to year and from decade to decade, both in aggregate for all trusts and especially for individual trusts. For example, over the seven-decade planning period, the combined trust alternative shows decade harvest levels ranging from 4.79 billion board feet to 8.83 billion board feet, an 84% swing. This could produce severe revenue flow problems for some beneficiaries. The Board's selected alternative shows inter-decade variations of 4.99 bbf to 5.97 bbf, a 20% change which is consistent with the Board's policy.

6.3 Other major barriers to realizing significant savings

In general, the scope of the Committee's work in making recommendations to Commissioner Sutherland is intended to be limited by the existing legal and contractual framework. However, Commissioner Sutherland agreed at the first Committee meeting that where there are obvious barriers that are feasible to overcome in the near term, the Committee may make that suggestion to the Commissioner. The Commissioner may then consider making appropriate policy proposals to the legislature. An obvious statutory barrier is the limit of the RMCA and FDA management fees to 25 percent of gross revenues. DNR's intention in bringing information to the Committee is to stimulate creative discussion related to its

management efficiency and effectiveness. If the Committee identifies barriers that significantly harm efficiency and effectiveness, and that the Committee believes can feasibly be eliminated, the department welcomes those recommendations.

7. Influences on Timber Price

This section provides information to help answer the following questions and requests:

- What effects are occurring from imports of Canadian wood?
- What effects are occurring or possible from changes in processing technology?
- What effects are occurring or possible from more active, targeted marketing of timber products from trust lands?

7.1 Effects from imports of Canadian wood

Canada currently exports a significant percentage of logs and lumber to the US log and lumber supply (approximately 30 percent). This dramatically affects the balance of supply and demand in the US domestic log market. Nowhere is the effect of this greater than here in the Pacific Northwest, which is located adjacent to British Columbia, Canada's most productive log source. Because the stumpage rates for timber from trust lands depends upon the strength of the domestic market, DNR timber revenues will rise or fall in accordance with the level of supply of Canadian logs in the US domestic log market.

New forecasts (for 2005-2006) by the Western Wood Products Association, as presented in Portland on October 13, 2005, indicate lumber production to decline very slightly with declining housing starts into 2005 and 2006. One prediction is that log supply and "cheap" logs in Canada may be a thing of the past. This potentially could hold stumpage even with slight declines in lumber prices.

7.2 Effects from changes in wood processing technology

The log supply picture has changed. Once dominated by large logs, today the market is dominated by smaller second and third rotation forests. Simultaneously, forest health issues, primarily on the east side of the Cascade Mountains, mean additional smaller logs in the market. Trust land management strategies will generally increase the log size, which may place us in tension with most mills. DNR is a player in the market, not a market maker; trust lands provide 10-15 percent of the domestically produce logs in Washington.

The wood processing industry is responding to this broad change in future log supply by investing heavily in new sophisticated equipment designed to maximize the merchantability of the smaller material that was once considered to be of very low value or useless. Innovation by industry is erasing the old paradigm that bigger logs are better.

A response to log supply quality shifts appears to be influencing new mill capacity to address these increased small wood increases. In the last few years, one significant change in the manufacturing picture is logs moving from Washington to less supplied regions in Oregon and California. These log supplies have influenced manufacturers to look seriously at

reallocating production capacity into Washington. The result is that more logs stay in Washington but with little or no impact on stumpage pricing structures.

7.3 Effects from more active, targeted marketing of timber products from trust lands

Over the past year and a half, DNR has instituted an aggressive marketing strategy. This strategy reaches out to customers as well as teaches staff how to better market sales.

Customer Outreach

- E-mailing Purchasers – Monthly e-mails of appraisal packets
- Purchaser conferences
- Internet – Appraisal Packets of sales, developing sale query
- Personal contacts with Purchasers, developing new markets
    - Contract Harvesting sales
    - Spruce house log sales

Internal Training and Scheduling

- Product Finder query system – Identifies stands with high value products and species
- Processor Database – Identifies what processors want, when they want it, how far they will go, and what size they want
- Timing Chart – When species specific sales should be sold
- Statewide marketing area map – Identifies areas that have similar purchasers
- Pre-Sales Planning training in spring of 2004
- Division and Region scheduling of sales utilizing marketing tools

Contract Harvesting Program

- Increased revenue from adjustments during sales
    - Wiehl Ridge – Peeler Douglas fir
    - Hungry Bug – Red cedar poles
    - Cougar Mountain – Engleman spruce house logs

8. Other Revenue Sources

This section provides information to help answer the following questions and requests:

- What is the potential from lands near the I-5 corridor?
- What is the potential for Wind farms and other revenue sources?
- What is the potential for further reductions in rotation age?
- What is the potential for short rotation hardwoods
- What is the potential for seeking voluntary payment of some management costs by private companies?

8.1 Potential from lands near the I-5 corridor

- About 16,000 acres of trust lands along the I-5 corridor have been identified for potential disposal. At an estimated average value of $10,000/acre they are worth approximately $160 million (land value only –timber not included).
- There are also an estimated 50,000 acres of transition lands, lands that are unlikely to remain in resource production due to their zoning or the nature of adjacent land uses. . At an estimated average value of $5,000/acre they are worth an additional $250 million (land value only –timber not included).
- The current income potential is very low in most instances.
- Potential reinvestment of the prospective $0.4 billion assets in the I-5 corridor and transition lands would yield annual gross revenue of some $20-30 million, assuming a minimum annual return of 5-7 percent.

8.2 Potential for wind farms and other revenue sources DNR is pursuing

Wind Power

New sources and methods of generating power are constantly under development in the energy sector. Wind power generation is becoming an increasingly viable resource to plug into the energy mix in the Northwest.

Wind power generation on public lands offers potentially significant revenues from leasing of land and ongoing payment of royalties. DNR currently manages about 20,000 acres of state trust land that meet criteria set forth by the industry as attractive to wind power developers.

DNR has been active since 1999 in considering wind power opportunities on state parcels. The department contracted with a specialist from Portland, Oregon, for technical and practical advice on developing a solid wind power development lease and how to go about negotiating with industrial proponents of wind power. DNR has developed a close working relationship with the National Renewable Energy Laboratory in Boulder, Colorado and local folks at Washington State University's Energy Office in Olympia. NREL facilitates the Western States Land Commissioners "Virtual Workgroup on Wind Power on State Lands". We have developed a model Wind Power lease now shared with other Land Grant States to help them as they develop their programs.

To date, DNR has issued 8 land use licenses (for wind power exploration) across the state for the purpose of obtaining wind data from selected DNR-managed parcels. The department has 4 active wind power development leases, and is negotiating on more.

New Communication Technology

The DNR communication site leasing program manages more than 500 leases at mountain top sites and other appropriate locations around the state. Current uses at these sites include cellular phone relays, microwave links, TV and FM broadcasters, and two-way radio transmitters. Some of the newest technologies of interest to the department are WiFi and WiMax, which are used for wireless internet and data transmission networks.

Oil and Gas Leasing

Interest by the petroleum industry, due to improved technologies and high petroleum prices, continues to motivate DNR to auction nominated lands for exploration. DNR recently (April 2004) held such an auction; there were 8 bidders. The department received bids on 601 Oil & Gas Leases. All lease areas are located in Eastern Washington, and the leases cover more than 320,000 acres. Inquires are already being received regarding interest in another oil and gas lease auction.

Vineyards and Wineries

DNR leases more than 3,500 acres of vineyard. The department is working with multiple stakeholders as we move forward to develop opportunities within the Red Mountain American Viticultural Area near Benton City.

Turn-key Orchards

The department bought an operating orchard earlier this year including investment in the current infrastructure such as the river pump station and fruit trees. This is the first project of its kind for state trust investment, and this property has shown itself to be an excellent producer. As this property demonstrates its return on investment, it is expected that the department may make similar investments in the future.

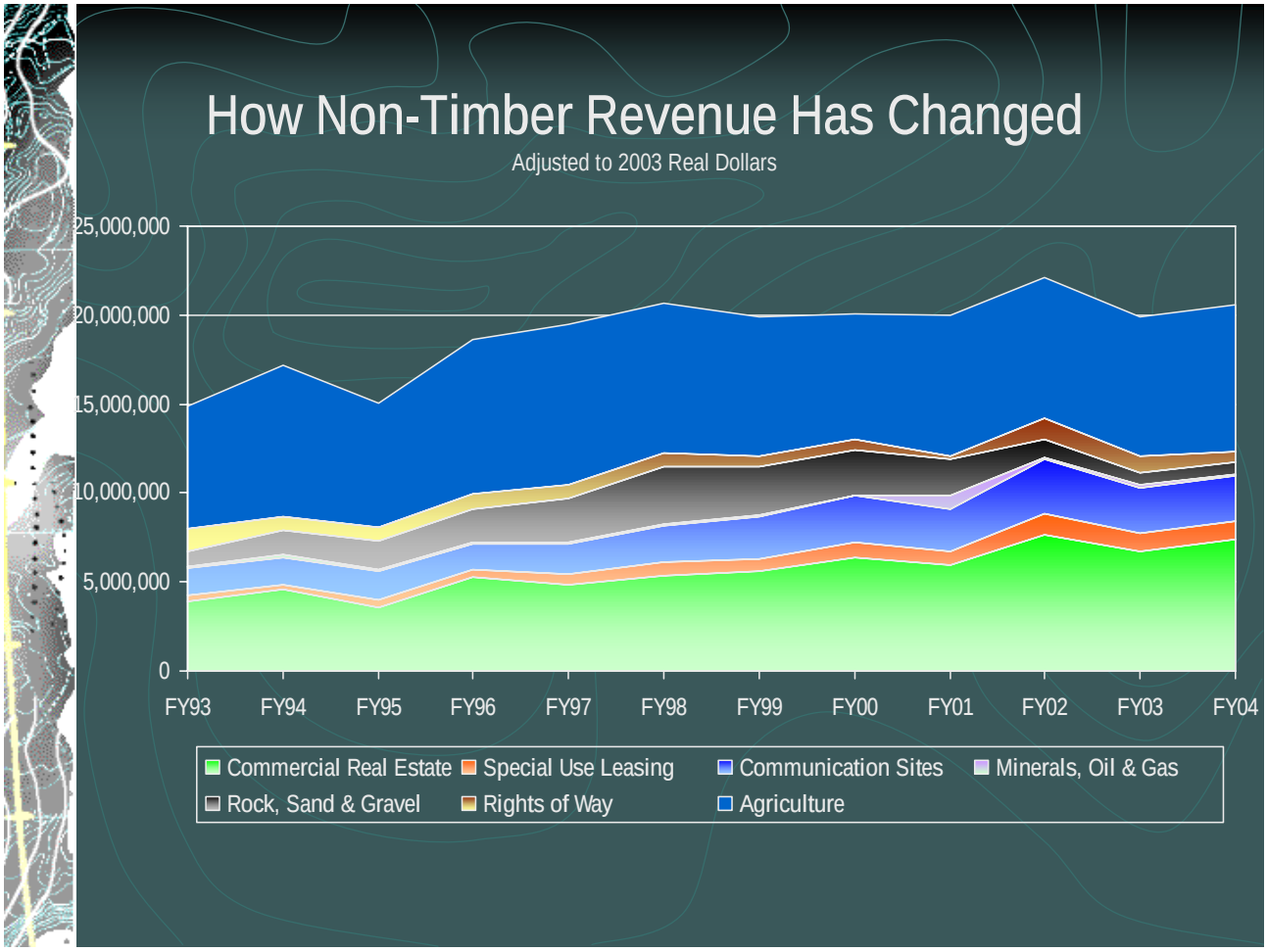
Balanced Agricultural Holdings

Dry land sharecrop revenue is 42 percent of trust agricultural revenue; irrigated crop revenue is 29 percent; and, orchard/vineyard revenue is 29 percent.

Direct Seeding on Dry Land Sharecrop Leases

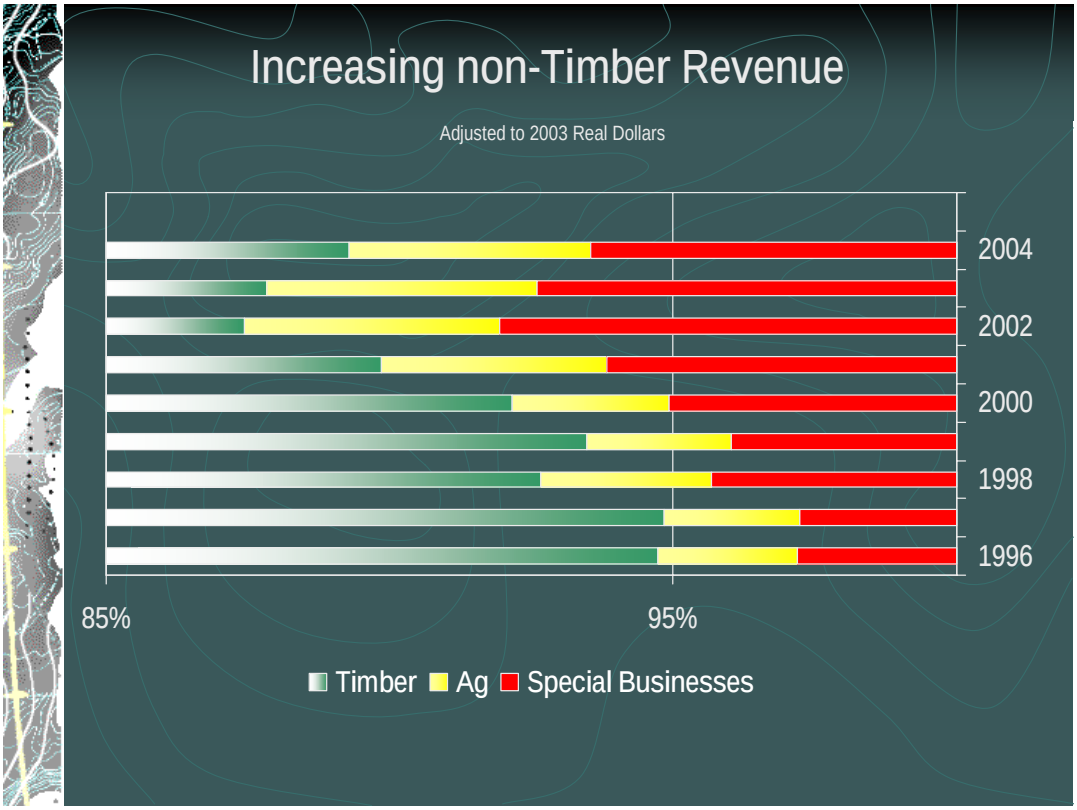
Through an incentive program, DNR has entered into agreements with 36 lessees to grow crops using direct seed or "no-till" methods. Direct seed is a cropping system, which leaves most of the crop and plant residue undisturbed on the soil surface, from harvest through to the next planting.

Figure 8-1 How Non-Timber Revenue Has Changed



While the objective has been to improve the portfolio through asset diversification, the following chart shows the dominance of timber. In this chart, the term "Special Businesses" is used; this is a catch-all category that bundles all the revenue sources identified in the previous chart, except agriculture.

Figure 8.2 Increasing Non-Timber Revenue



8.3 Potential for further reductions in rotation age

In the recently completed Sustainable Harvest EIS, one alternative considered was to apply more traditional industrial management practices, including shorter rotations to those trust lands not constrained by other legal obligations. For example, under that alternative an average rotation age for Douglas fir on average sites would be 50 years. In the alternative the Board selected, there are a variety of rotation ages, depending on management objectives.

The alternative with shorter rotation ages was estimated to have a first decade average annual timber harvest volume of 648 MMBF, compared to 597 MMBF for the Board's selected alternative. That translates into approximately $162 million per year in trust revenue, compared to approximately $150 million per year for the Board's selected alternative. The alternative with the shorter rotations did not meet the Board's objective to employ innovative silviculture which is intended to simultaneously increase production of both complex habitat and trust income, thereby accelerating department compliance with its contractual HCP commitments for habitat creation. Meeting HCP habitat goals more quickly will increase management flexibility over the long term, which benefits the trusts.

8.4 Potential for short rotation hardwoods

The largest factor that affects DNR's presence or role in the future hardwood market is the shift to focusing on marketing strategies, "Value Based," aimed at increasing revenues through better product merchandising and improved targeting of customers' niche product demands. This includes hardwoods.

DNR currently has no plans for large-scale conversion of trust lands forests to short rotation hardwood-dominated stands. There are significant supply and price problems with hybrid cottonwood stands; such stands, grown on agricultural rotations of less than ten years, may never be harvested.

However there are a few factors that will contribute to an anticipated increase in the amount of hardwoods grown under conventional rotations, from existing stands on trust lands.

- **Westside Sustainable Harvest** – An increase in the amount of wood available for harvest annually translates into additional hardwood volumes.
- **Riparian Strategy Update** – The plan enabling harvest activities within riparian areas is in the final stages of negotiations and approval by federal agencies… More riparian harvest activity = more hardwoods.
- The shift to '**Value-Based' marketing strategies** aimed at increasing revenues through better product merchandising and improved targeting of all our customer's niche product demands (including hardwoods).

8.5 Potential for seeking voluntary payment of some management costs by private companies

RCW 43.30.490 authorizes DNR to enter into voluntary cost-reimbursement agreements with applicants for "permits" or "leases" in order to recover the costs of processing the permits and leases. However, that statute does not apply to many management activities conducted by DNR, such as timber sales. The state legislature would need to expand DNR's existing cost recovery authority in order for DNR to accept payment of those operating costs from private companies.